

# EXHIBIT A

Jaime Sepulveda, M.D.

Page 1

IN THE UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA  
CHARLESTON DIVISION

IN RE: ETHICON, INC.,	Master File No.
PELVIC REPAIR SYSTEM PRODUCTS	2:12-MD-02327
LIABILITY LITIGATION,	MDL No. 2327
/	JOSEPH R. GOODWIN
THIS DOCUMENT RELATES TO	U.S. DISTRICT JUDGE

PLAINTIFFS:

Joplin, Deborah Lynn	2:12-cv-00787
Wheeler, Pamela Gray	2:12-cv-00455
Collins, Fran	2:12-cv-00931
Frye, Jackie	2:12-cv-01004
Bennett, Dina Sanders	2:12-cv-00497
Miracle, Charlene	2:12-cv-00510
Adams, Joan	2:12-cv-001203
Grabowski, Louise	2:12-cv-00683
Vignos-Ware, Barbara	2:12-cv-00761
Harter, Beth	12-cv-00737
Scholl, Sheri	12-cv-00738
Stubblefield, Margaret	12-cv-00842
Warmack, Roberta	12-cv-01150
Smith, Carrie	2:12-cv-00258
Thomas (Wyatt), Kimberly	2:12-cv-00499
Georgilakis, Teresa	2:12-cv-00829
Cone, Mary	2:12-cv-00261
Destefano-Raston, Dina	2:12-cv-01299
Hooper, Nancy	2:12-cv-00493
Lee, Alfreda	2:12-cv-01013
Reyes, Jennifer	2:12-cv-00939
Fisk, Paula	2:12-cv-00848
Sikes, Jennifer	2:12-cv-00501
Swint, Isabel	2:12-cv-00786
Teasley, Krystal	2:12-cv-00500
Thaman(Reeves), Susan	2:12-cv-00279
Warlick, Cathy	2:12-cv-00276
Sheperd, Donna	2:12-cv-00967

DEPOSITION OF JAIME SEPULVEDA, M.D.

Wednesday, March 30, 2016  
8:12 a.m. - 4:33 p.m.  
200 South Biscayne Blvd.  
Miami Beach, Florida

Jaime Sepulveda, M.D.

Page 2	Page 4
<p>1 APPEARANCES:</p> <p>2 On behalf of Plaintiffs:</p> <p>3 EDWARDS &amp; DE LA CERDA</p> <p>4 3031 Allen Street, Suite 100</p> <p>5 Dallas, Texas 75204</p> <p>6 888.795.3352</p> <p>7 BY: PETER DE LA CERDA, ESQUIRE</p> <p>8 peter@edwardsdelacerda.com</p> <p>9</p> <p>10 MOSTYN LAW</p> <p>11 6280 Delaware Street</p> <p>12 Beaumont, Texas 77706</p> <p>13 800.400.4000</p> <p>14 BY: MARK C. SPARKS, ESQUIRE</p> <p>15 mark@mostynlaw.com</p> <p>16</p> <p>17 On behalf of Defendant:</p> <p>18</p> <p>19 BUTLER SNOW, LLP</p> <p>20 500 Office Center Drive</p> <p>21 Suite 400</p> <p>22 Fort Washington, Pennsylvania 19034</p> <p>23 267.513.1884</p> <p>24 BY: NILS B. SNELL, ESQUIRE</p> <p>burt.snell@butlersnow.com</p>	<p>1 Exhibit 9 Thumb Drive with Materials 49</p> <p>2 Relating to Prolift</p> <p>3</p> <p>4 Exhibit 10 Thumb Drive with Materials 50</p> <p>5 Relating to RVT-S</p> <p>6 Exhibit 11 Medical Literature 51</p> <p>7 Exhibit 12 Article: Randomized controlled 52</p> <p>8 trial comparing TVT-O and TVT-S</p> <p>9 for the treatment of stress</p> <p>10 urinary incontinence: 2-year</p> <p>11 results</p> <p>12 Exhibit 13 Curriculum Vitae 53</p> <p>13 Exhibit 14 Reliance List 54</p> <p>14 Exhibit 15 General Expert Opinion Report 55</p> <p>15 on Gynemesh PS, Prolift and</p> <p>16 Prosima</p> <p>17 Exhibit 16 General Expert Opinion Report 55</p> <p>18 on TVT and TVT-O</p> <p>19</p> <p>20 Exhibit 17 Invoices 60</p> <p>21</p> <p>22 Exhibit 18 Thumb Drive with Presentation 71</p> <p>23 Material</p> <p>24</p>
Page 3	Page 5
<p>1</p> <p>2 INDEX</p> <p>3 Examination Page</p> <p>4 Direct By Mr. De La Cerda 5</p> <p>5 Cross By Mr. Snell 269</p> <p>6</p> <p>7 Certificate of Oath 302</p> <p>8 Certificate of Reporter 303</p> <p>9</p> <p>10 EXHIBITS</p> <p>11 No. Page</p> <p>12 Exhibit 1 Gynecare Prolift and Gynecare 43</p> <p>13 Gynemesh PS Preceptor</p> <p>14 Presentation Kit</p> <p>15 Exhibit 2 Surgeon's Resource Monograph 43</p> <p>16 Exhibit 3 Medical Literature 44</p> <p>17 Exhibit 4 Book: Biomechanics: Mechanical 46</p> <p>18 Properties of Living Tissues,</p> <p>19 Chapter 7</p> <p>20 Exhibit 5 Book: Introductory 46</p> <p>21 Biomechanics From Cells to</p> <p>22 Organisms, Chapter 9</p> <p>23 Exhibit 6 Book: Introductory 47</p> <p>24 Biomechanics From Cells to</p> <p>Organisms, Chapter 12</p> <p>Exhibit 7 Thumb Drive with Materials 49</p> <p>Related to TVT and TVT-O</p> <p>Exhibit 8 Thumb Drive with Materials 49</p> <p>Relating to TVT-S</p>	<p>1 PROCEEDINGS</p> <p>2 - - -</p> <p>3 Thereupon:</p> <p>4 JAIME SEPULVEDA, M.D.,</p> <p>5 having been first duly sworn, was examined and</p> <p>6 testified as follows:</p> <p>7 THE WITNESS: I do.</p> <p>8 DIRECT EXAMINATION</p> <p>9 BY MR. DE LA CERDA:</p> <p>10 Q. Okay. Doctor, could you please state your</p> <p>11 full name for the record?</p> <p>12 A. Jaime L. Sepulveda.</p> <p>13 Q. You're a urogynecologist hired by Johnson &amp;</p> <p>14 Johnson and Ethicon, Inc. to provide opinions in</p> <p>15 support of TVT, TVT-O, Gynemesh, Prolift and Prosima;</p> <p>16 correct?</p> <p>17 MR. SNELL: Form.</p> <p>18 A. I have -- I have been subpoenaed to provide</p> <p>19 expert testimony about these products.</p> <p>20 Q. (By Mr. De La Cerda) My name is Peter</p> <p>21 de al Cerda, I'm one of the attorneys who represents</p> <p>22 the plaintiffs' group.</p> <p>23 Do you understand who I am and who I</p> <p>24 represent?</p>

2 (Pages 2 to 5)

Jaime Sepulveda, M.D.

Page 6	Page 8
<p>1 A. Yes, I do.</p> <p>2 Q. A couple of deposition rules. As we begin,</p> <p>3 first of all, we want to try to let each other finish,</p> <p>4 so allow my question to get out fully before you begin</p> <p>5 your answer and then I'll allow your answer to get out</p> <p>6 fully before I begin my next question. Is that fair?</p> <p>7 A. Yes.</p> <p>8 Q. And also when you're responding to</p> <p>9 questions, please do so verbally as opposed to an</p> <p>10 "uh-huh" or "uh-uh" or a head nod so it is clear on</p> <p>11 the record. Okay?</p> <p>12 A. Yes.</p> <p>13 Q. Also, if you don't understand my question,</p> <p>14 please ask me to repeat or rephrase it, otherwise,</p> <p>15 I'll assume that you understood my question. Is that</p> <p>16 fair?</p> <p>17 A. Yes.</p> <p>18 Q. And, of course, if you need a break at any</p> <p>19 time, please let me know and we'll take a break. The</p> <p>20 only thing is if there's a question pending, I ask the</p> <p>21 question be responded to before we take the break.</p> <p>22 Okay?</p> <p>23 A. I -- I understand.</p> <p>24 Q. All right. This is not the first deposition</p>	<p>1 you were the treater, what type of case was that? I</p> <p>2 know it's medical malpractice, but what was the</p> <p>3 subject of that case?</p> <p>4 A. That -- that was in 1994, a pelvic mass,</p> <p>5 specifically a sacral mass.</p> <p>6 Q. Okay. And then how about the one where you</p> <p>7 acted as the expert for the defense?</p> <p>8 A. It was a case of urinary incontinence after</p> <p>9 a vaginal delivery.</p> <p>10 Q. And do you recall approximately when that</p> <p>11 one was?</p> <p>12 A. That may have been three to four years ago.</p> <p>13 Q. Did either of those cases involve Butler</p> <p>14 Snow?</p> <p>15 A. No.</p> <p>16 Q. Okay. And then in the Garcia versus</p> <p>17 Ethicon, you acted as an expert on behalf of Johnson &amp;</p> <p>18 Johnson and Ethicon; correct?</p> <p>19 A. That's correct.</p> <p>20 Q. All right. Any other depositions other than the</p> <p>21 ones you already mentioned?</p> <p>22 A. No other depositions.</p> <p>23 Q. Okay. A few questions here. I assume the</p> <p>24 answers to these are all no, but have you ever had</p>
Page 7	Page 9
<p>1 you've given; correct?</p> <p>2 A. That's correct.</p> <p>3 Q. What other depositions have you given?</p> <p>4 A. I have given depositions on Garcia versus</p> <p>5 Ethicon.</p> <p>6 Q. Okay. Anything else?</p> <p>7 A. Yes, I have given deposition in local cases</p> <p>8 against a physician.</p> <p>9 Q. Okay. So any other mesh cases where you've</p> <p>10 given a deposition other than Garcia?</p> <p>11 A. Only Garcia.</p> <p>12 Q. Okay. And then you've also given</p> <p>13 depositions, I guess, in medical malpractice cases?</p> <p>14 A. Yes.</p> <p>15 Q. Okay. How many of those have you given?</p> <p>16 A. I have given two.</p> <p>17 Q. Two. And have you acted as a treater or as</p> <p>18 an expert in those cases?</p> <p>19 A. One was as a treater and the other one was</p> <p>20 as an expert.</p> <p>21 Q. Okay. And when you acted as the expert,</p> <p>22 were you for the plaintiff or for the defense?</p> <p>23 A. I was for the defense.</p> <p>24 Q. And generally speaking, in the case where</p>	<p>1 your privileges at a hospital revoked, suspended or</p> <p>2 limited in any way?</p> <p>3 A. No.</p> <p>4 Q. Have you ever personally been sued for</p> <p>5 medical malpractice?</p> <p>6 A. Yes.</p> <p>7 Q. Okay. And what was the subject of that</p> <p>8 particular case?</p> <p>9 A. It -- it was, again, a chordoma,</p> <p>10 c-h-o-r-d-o-m-a, a chordoma, which is a tumor on the</p> <p>11 sacrum.</p> <p>12 Q. I see. Okay.</p> <p>13 A. And the other one was an injury to the</p> <p>14 ureter during the excision of a 20-centimeter pelvic</p> <p>15 mass.</p> <p>16 Q. Okay. So these are two separate cases;</p> <p>17 correct?</p> <p>18 A. Yes.</p> <p>19 Q. In the first case that involved the</p> <p>20 chordoma, so you were the defendant in that case?</p> <p>21 A. Yes.</p> <p>22 Q. And was this the one from 1994?</p> <p>23 A. Yes.</p> <p>24 Q. Okay. So you actually gave a deposition in</p>

3 (Pages 6 to 9)

Jaime Sepulveda, M.D.

Page 10	Page 12
<p>1 that case; right? Is that right?</p> <p>2 A. Yes.</p> <p>3 Q. And in the second case, the injury to ureter</p> <p>4 with the pelvic mass, did you end up not giving a</p> <p>5 deposition in that case?</p> <p>6 A. There was no deposition.</p> <p>7 Q. Okay. Without revealing -- I know</p> <p>8 settlements many times can be confidential. Without</p> <p>9 revealing any confidentiality, can you tell us</p> <p>10 anything about the resolution of those two cases?</p> <p>11 A. They were both settled.</p> <p>12 Q. Settled, okay.</p> <p>13 Okay. So no trial; right?</p> <p>14 A. There -- there was no trial and it was for a</p> <p>15 fully disclosed amount.</p> <p>16 Q. Okay. Any other litigation against you</p> <p>17 other than those two cases that we talked about, any</p> <p>18 litigation of any type?</p> <p>19 A. No.</p> <p>20 Q. Have you ever had a disciplinary action</p> <p>21 against you by any medical board?</p> <p>22 A. No.</p> <p>23 Q. Have you ever been arrested or convicted of</p> <p>24 a crime?</p>	<p>1 you were the expert for the defense on the urinary</p> <p>2 incontinence after the vaginal delivery? Do you</p> <p>3 remember a name?</p> <p>4 A. I cannot recall.</p> <p>5 Q. Okay. That would just make it easier to</p> <p>6 reference, but ...</p> <p>7 Okay. In all four of these cases, the</p> <p>8 Cavness case, the Garcia case, the Ramirez case and</p> <p>9 the case involving urinary incontinence after vaginal</p> <p>10 delivery, all four of those cases you were retained by</p> <p>11 the defense; correct?</p> <p>12 A. That's correct.</p> <p>13 Q. You've never testified for the plaintiff as</p> <p>14 an expert; is that right?</p> <p>15 A. I have not testified for the -- for a</p> <p>16 plaintiff. I have given opinions as part of the State</p> <p>17 of Florida Prosecution Unit, which is actually known</p> <p>18 as the Department of Health, Department of Health now.</p> <p>19 It's work that I have done for years for the</p> <p>20 Department of Health.</p> <p>21 Q. Are these like criminal investigations into</p> <p>22 doctors or what -- what is it?</p> <p>23 A. You know, that's why they eliminated the</p> <p>24 Prosecution Unit name because it sounds criminal, so</p>
Page 11	Page 13
<p>1 A. No.</p> <p>2 Q. Okay. We discussed -- okay. Other than</p> <p>3 being retained in the Garcia case as an expert and in</p> <p>4 this -- in the case where you were retained as an</p> <p>5 expert that you mentioned before where you did a</p> <p>6 deposition, have you ever been retained as an expert</p> <p>7 in litigation, other than those two instances you've</p> <p>8 already mentioned?</p> <p>9 MR. SNELL: Hold on, hold on. I'm going to</p> <p>10 instruct you. To the extent you have not been</p> <p>11 disclosed, you should be mindful of that and not</p> <p>12 identify those cases. To the extent you have not</p> <p>13 been disclosed, either by deposition, expert</p> <p>14 report, doing an IME of the plaintiff, under the</p> <p>15 rules, depending upon where you may have been</p> <p>16 retained, that is confidential information.</p> <p>17 A. I gave testimony on Cavness.</p> <p>18 Q. (By Mr. De La Cerda) Okay. Other than</p> <p>19 Cavness, Garcia and then this other case involving</p> <p>20 urinary incontinence after vaginal delivery, any</p> <p>21 other cases where you've been designated as an</p> <p>22 expert?</p> <p>23 A. On -- on Ramirez.</p> <p>24 Q. Right. Is there a name to the case where</p>	<p>1 now we all understand that it's -- it's any complaints</p> <p>2 that have been brought against a physician in my -- in</p> <p>3 my specialty, I and the board feels that needs to be</p> <p>4 reviewed, I review.</p> <p>5 Q. Okay. And how long have you been doing</p> <p>6 that?</p> <p>7 A. Close to 15 years.</p> <p>8 Q. 15 years. Okay.</p> <p>9 Let's talk briefly about your role as a</p> <p>10 consultant for Ethicon outside of litigation. Okay?</p> <p>11 So this word "litigation" is not contemplated, this is</p> <p>12 just your role as a consultant in what -- helping out</p> <p>13 what Ethicon does in its normal business. Okay?</p> <p>14 So, first of all, in the past, you have been</p> <p>15 hired as a consultant for Ethicon; correct?</p> <p>16 A. Yes.</p> <p>17 Q. Okay. And do you recall when you were first</p> <p>18 hired as a consultant for Ethicon?</p> <p>19 A. It may have been just after the year 2000,</p> <p>20 2002. I don't recall the specific year.</p> <p>21 Q. Okay. But early 2000s?</p> <p>22 A. About -- about that time.</p> <p>23 Q. Okay. And what was the purpose of you being</p> <p>24 hired on as a consultant when you first started?</p>

4 (Pages 10 to 13)

Jaime Sepulveda, M.D.

Page 14	Page 16
<p>1 A. Initially, I was given the opportunity to --</p> <p>2 to dissect cadavers and to put together the anatomy</p> <p>3 for the dissection in specimens as it would apply to</p> <p>4 the use of products.</p> <p>5 Q. Okay. So I'm having a little trouble</p> <p>6 understanding what that might be. Explain to me what</p> <p>7 you would do, then, on a typical day involving that</p> <p>8 particular role.</p> <p>9 A. It changed. It changed over the -- over the</p> <p>10 years. I started dissecting and teaching and being</p> <p>11 involved with my peers on how to use the different</p> <p>12 products and it was just an interest that I -- that I</p> <p>13 had very early in my career about surgical anatomy.</p> <p>14 So I just expanded that and I was given the</p> <p>15 opportunity while -- I was given instruments to work</p> <p>16 in the gallery.</p> <p>17 Q. Okay. Did you have a title when you first</p> <p>18 began as a consultant for Ethicon?</p> <p>19 A. No.</p> <p>20 Q. Okay. Were there defined duties that you</p> <p>21 had when you first started out as a consultant?</p> <p>22 MR. SNELL: Form.</p> <p>23 A. No, nothing -- nothing that was defined as</p> <p>24 different task.</p>	<p>1 Q. Okay. So is that 2012, approximately?</p> <p>2 A. Yes.</p> <p>3 Q. Okay. So I guess that's about ten years of</p> <p>4 acting as a consultant; is that fair?</p> <p>5 A. Yes.</p> <p>6 Q. Okay. So the manner in which your role as a</p> <p>7 consultant changed, was it really in -- in regard to</p> <p>8 the products themselves, what kind of product you were</p> <p>9 teaching, or is there some other way in which it</p> <p>10 changed?</p> <p>11 A. It changed. It changed based on what --</p> <p>12 whatever was understood that there was a need.</p> <p>13 Q. Okay. Can you give me some examples?</p> <p>14 A. Initially, it was seeing the products, how</p> <p>15 they would work, and nothing -- nothing in terms of</p> <p>16 experiment or research and development. It was more</p> <p>17 on how -- how to reproduce their use in the -- in the</p> <p>18 operating room.</p> <p>19 Q. Mm-hmm.</p> <p>20 A. And then I was able to -- to see -- to see</p> <p>21 how -- how the products were actually implemented</p> <p>22 in -- in the surgical environment. And there was a</p> <p>23 time in which I would just see other surgeons that</p> <p>24 were consultants. And then there was a time in which</p>
Page 15	Page 17
<p>1 Q. (By Mr. De La Cerda) Okay. They didn't</p> <p>2 have, like, a job description that was given to you</p> <p>3 when you first started?</p> <p>4 A. No.</p> <p>5 Q. Okay. And so in this role involving</p> <p>6 dissecting cadavers, where you were teaching other</p> <p>7 peers about how to use the Ethicon products, was that</p> <p>8 a role that remained consistent throughout your time</p> <p>9 as a consultant for Ethicon or did it change over</p> <p>10 time?</p> <p>11 A. It changed based on the needs that they had,</p> <p>12 for what -- what they understood was my expertise.</p> <p>13 Q. Okay. So let's do this. So the beginning</p> <p>14 is approximately the beginning of the 2000s. Has that</p> <p>15 con- -- has that role as a consultant for Ethicon</p> <p>16 ended or do you continue to be a consultant for</p> <p>17 Ethicon?</p> <p>18 A. No, I don't consult with them anymore beyond</p> <p>19 the legal.</p> <p>20 Q. And so when did your role as a consultant</p> <p>21 end?</p> <p>22 A. Just -- just about the time that the</p> <p>23 products -- the prolapse products were</p> <p>24 decommercialized.</p>	<p>1 I would go to and meet with -- with a group at Ethicon</p> <p>2 and give a conference on anatomy or I would take them</p> <p>3 to the lab and show them the anatomy.</p> <p>4 Q. Mm-hmm.</p> <p>5 A. And then there was a time in which I</p> <p>6 actually wrote a manual of how to dissect -- dissect a</p> <p>7 specimen, make the best of that dissection.</p> <p>8 Q. Okay. But tell me about this manual. What</p> <p>9 is it that you'd be dissecting -- so tell me, what was</p> <p>10 the content of this manual?</p> <p>11 A. The labs -- the labs using specimens are</p> <p>12 very unique and they're very -- they're very</p> <p>13 expensive.</p> <p>14 Q. Okay.</p> <p>15 A. And the whole setup of getting a good</p> <p>16 specimen. And what we call "specimens" is a portion</p> <p>17 of a person and there -- there are certain things that</p> <p>18 we have to follow over the years, over the last 25</p> <p>19 years that I have learned dissecting and understanding</p> <p>20 the anatomy. One of the most complex anatomies that</p> <p>21 you can have in any other -- other part of the body.</p> <p>22 So when we -- when we did this and there's -- my</p> <p>23 interest was that, and I verbalized that, that we</p> <p>24 could make the best use of these specimens in the lab.</p>

5 (Pages 14 to 17)

Jaime Sepulveda, M.D.

<p style="text-align: right;">Page 18</p> <p>1 Q. Mm-hmm.</p> <p>2 A. And not only that it would be -- it would be</p> <p>3 the best use, but also that it would be a systematic</p> <p>4 approach in the same way that first-year medical</p> <p>5 students are taught anatomy.</p> <p>6 Q. Mm-hmm. Okay.</p> <p>7 A. So to get -- to make that organized and to</p> <p>8 make that systematic and to make that consistent, then</p> <p>9 there was -- there was a proposal for a manual. That</p> <p>10 was just one part of -- of what could be done in -- in</p> <p>11 the lab -- laboratory.</p> <p>12 Q. And this was a manual that was done for</p> <p>13 Ethicon; right?</p> <p>14 A. It was done for -- for them, but I think it</p> <p>15 was -- there were other -- other considerations</p> <p>16 beyond -- beyond anatomy and probably did not get</p> <p>17 developed, but I got the -- I got the opportunity to</p> <p>18 take my pictures and actually put it in -- on my thumb</p> <p>19 drive with presentations, which you're going to be</p> <p>20 requesting.</p> <p>21 Q. Okay. Are these cadaver specimens, they're</p> <p>22 reused for purposes of teaching doctors how to do --</p> <p>23 how to, for example, implant Ethicon's products;</p> <p>24 right?</p>	<p style="text-align: right;">Page 20</p> <p>1 have you now explained all the various things that you</p> <p>2 did as a consultant on behalf of Ethicon?</p> <p>3 MR. SNELL: Form.</p> <p>4 A. I -- I actually look at presentations. In</p> <p>5 addition to, I look at presentations. I would make a</p> <p>6 presentation to -- to different groups within Ethicon.</p> <p>7 Q. (By Mr. De La Cerda) You would do</p> <p>8 presentations for other physicians about Ethicon's</p> <p>9 products; is that correct?</p> <p>10 A. About Ethicon products and about the</p> <p>11 condition itself.</p> <p>12 Q. Okay. And did the presentations that you do</p> <p>13 to other doctors for Ethicon include TVT, TVT-O,</p> <p>14 Gynemesh, Prolift and Prosima?</p> <p>15 A. It was TVT-O, TVT-Secur, Gynemesh, Prosima,</p> <p>16 and Prolift.</p> <p>17 Q. Any reason why you didn't do presentations</p> <p>18 on regular TVT or TVT-R?</p> <p>19 A. I had a -- I had a preference for the</p> <p>20 transobturator slings.</p> <p>21 Q. Had you used in the past a TVT Retropubic</p> <p>22 for your patients?</p> <p>23 A. Yes.</p> <p>24 Q. And why is it that you preferred the TVT-O</p>
<p style="text-align: right;">Page 19</p> <p>1 A. Well, cadavers are used in sections and,</p> <p>2 obviously, we're going to -- we're going to use a</p> <p>3 section that pertains to the procedure that we're</p> <p>4 doing and they -- they form the basis of teaching</p> <p>5 anatomy from the first year of medical school.</p> <p>6 Q. Do they -- do the cadaver -- I guess the</p> <p>7 portions of the cadaver that are used to present how</p> <p>8 to implant products, do they eventually get used, to a</p> <p>9 certain extent, to where, okay, we can't use this</p> <p>10 cadaver anymore, like it's been used too much for this</p> <p>11 particular presentation?</p> <p>12 A. You can -- you can always make -- make the</p> <p>13 best of what you're examining. So, yeah, if there is</p> <p>14 a portion that is used, you can always go to different</p> <p>15 things that you can teach from the -- from the</p> <p>16 cadaver. That's highly dependent on the condition of</p> <p>17 the cadaver.</p> <p>18 Q. Yeah.</p> <p>19 A. It's highly dependent on how it was</p> <p>20 prepared. It's highly dependent on how those</p> <p>21 individuals that are doing the dissection know how to</p> <p>22 do it.</p> <p>23 Q. Okay. Okay. So going back to your role as</p> <p>24 a consultant for Ethicon and what it is that you did,</p>	<p style="text-align: right;">Page 21</p> <p>1 over the TVT?</p> <p>2 A. I felt I could do the same with less risk.</p> <p>3 Q. And what risk are you specifically talking</p> <p>4 about?</p> <p>5 A. Getting to the bladder. Very rare, but</p> <p>6 potential getting to the bowel and getting to a major</p> <p>7 blood vessel.</p> <p>8 Q. You've testified before that you've made --</p> <p>9 you've made about \$100,000 a year as a consultant for</p> <p>10 Ethicon; is that right?</p> <p>11 A. That -- I may have testified to that number,</p> <p>12 yes.</p> <p>13 Q. Okay. And so if we're talking about ten</p> <p>14 years, we're talking about approximately a million</p> <p>15 dollars you made as a consultant for Ethicon; correct?</p> <p>16 MR. SNELL: Form.</p> <p>17 A. No, it doesn't -- doesn't get to that</p> <p>18 because it wasn't -- it wasn't like a salary. It was</p> <p>19 in a -- in a need and there were years that it was</p> <p>20 \$3,000.</p> <p>21 Q. (By Mr. De La Cerda) Do you have an</p> <p>22 approximation of how much you made total as a</p> <p>23 consultant for Ethicon?</p> <p>24 A. I -- I think the largest and the best year,</p>

6 (Pages 18 to 21)



Jaime Sepulveda, M.D.

Page 22	Page 24
<p>1 most active year, I may have done about 100. But</p> <p>2 that -- that's probably one or two years.</p> <p>3 Q. Do you have a range, total, for all the</p> <p>4 years that you acted as a consultant for Ethicon?</p> <p>5 A. Never -- never really counted.</p> <p>6 Q. Do you have any documentation of that, of</p> <p>7 what the numbers might be?</p> <p>8 A. My 1099s that I receive or my tax returns.</p> <p>9 Q. Okay. And if Ethicon has records of that,</p> <p>10 you'd, of course, defer to whatever those records say;</p> <p>11 right?</p> <p>12 MR. SNELL: Objection, form, foundation.</p> <p>13 A. As -- as long as they correlate with my</p> <p>14 1099.</p> <p>15 Q. (By Mr. De La Cerda) Right. So if they</p> <p>16 had records of the 1099s, which I assume they do,</p> <p>17 you would defer to whatever those numbers are;</p> <p>18 right?</p> <p>19 A. I -- I would defer to that.</p> <p>20 Q. When you've presented on Ethicon's products,</p> <p>21 where have those presentations occurred,</p> <p>22 geographically?</p> <p>23 A. You know, it happened mostly here either in</p> <p>24 Florida or in New Jersey. Occasionally, I would go</p>	<p>1 specifics on which hotel we could stay and -- and no</p> <p>2 first class traveling, and there was compensation, if</p> <p>3 we would drive, for the miles --</p> <p>4 Q. Okay.</p> <p>5 A. -- and there were also some -- some limits</p> <p>6 on what we could spend on food, although most of the</p> <p>7 time food was provided there.</p> <p>8 Q. Do you know whether Ethicon believed you to</p> <p>9 be a good preceptor or teacher on its TVT products?</p> <p>10 A. I -- I think that they visualized me as a</p> <p>11 good surgeon with good common surgical sense.</p> <p>12 Q. And I just used the term "preceptor," I need</p> <p>13 to make sure that's understood. Could you explain to</p> <p>14 us what the term -- what your understanding of the</p> <p>15 term "preceptor" is?</p> <p>16 A. The preceptor is -- is a term that was, I</p> <p>17 believe, from mostly the marketing people. I never</p> <p>18 really saw myself as a preceptor.</p> <p>19 Q. Mm-hmm.</p> <p>20 A. I saw myself as a surgeon. And if you ask</p> <p>21 any of my colleagues, they don't see me as a</p> <p>22 preceptor. Through the course -- through the years, I</p> <p>23 have seen doctors that have seen me for every single</p> <p>24 product and we always ended up talking about the same</p>
Page 23	Page 25
<p>1 to -- to other cities, Austin, Toronto, Dallas,</p> <p>2 Boston. Never -- never too -- never too far. I -- I</p> <p>3 made that decision that I wasn't going to go, let's</p> <p>4 say, to the Northwest or California maybe once because</p> <p>5 I have a practice that I have to take care of.</p> <p>6 Q. Right. I guess you have the advantage, too,</p> <p>7 of being in Miami, doctors would want to come to you</p> <p>8 for the -- were there many presentations here in</p> <p>9 Miami, too?</p> <p>10 A. There -- there were -- yeah, there were some</p> <p>11 in Miami, absolutely.</p> <p>12 Q. Okay. When the presentations were out of</p> <p>13 town, Ethicon, of course, covered your -- your meals,</p> <p>14 your lodging, your transportation; right?</p> <p>15 A. With- -- within the -- within the range that</p> <p>16 was specified for that kind of traveling.</p> <p>17 Q. How was that done? How was the range</p> <p>18 specified?</p> <p>19 A. We -- we were required to take a course on</p> <p>20 guidelines for -- as consultants for any kind of</p> <p>21 industry.</p> <p>22 Q. Mm-hmm. And do you recall any of what those</p> <p>23 guidelines were?</p> <p>24 A. I -- I do recall there was -- there were</p>	<p>1 thing, the anatomy and the surgery.</p> <p>2 Q. Mm-hmm. And so preceptor, I guess that's</p> <p>3 used as some version of saying that someone's a</p> <p>4 teacher; is that right?</p> <p>5 A. I -- I think it was an internal term for --</p> <p>6 for them, preceptor, and it's -- it doesn't get to the</p> <p>7 level of a teacher or a professor, it doesn't have</p> <p>8 that -- that responsibility. It doesn't have -- it</p> <p>9 has mostly the role of showing something, of</p> <p>10 demonstrating.</p> <p>11 Q. Okay. Do you know whether Ethicon ever</p> <p>12 criticized the way in which you taught other</p> <p>13 physicians in preceptorships?</p> <p>14 A. They -- they did not have a specific</p> <p>15 criticism and they -- they would ask, whenever they</p> <p>16 would bring someone to see me operating, that they had</p> <p>17 a -- that the doctors could get to see as much as they</p> <p>18 could see in terms of the variety of procedures, but,</p> <p>19 obviously, that -- the cases are what the cases are.</p> <p>20 Q. Yeah.</p> <p>21 A. You show what you have.</p> <p>22 Q. Ethicon -- I guess, in other words, Ethicon</p> <p>23 never said -- made you personally aware of any</p> <p>24 specific criticisms of any type of the manner in which</p>

7 (Pages 22 to 25)



Jaime Sepulveda, M.D.

<p style="text-align: right;">Page 26</p> <p>1 you were teaching other doctors how to perform these</p> <p>2 procedures; right?</p> <p>3 MR. SNELL: Form.</p> <p>4 A. There -- there was -- it was a relationship</p> <p>5 with -- with a lot of respect for what I did, for what</p> <p>6 I brought to the -- to their table.</p> <p>7 Q. (By Mr. De La Cerda) Okay. So the answer</p> <p>8 is no, you never became aware of any criticisms;</p> <p>9 right?</p> <p>10 A. No.</p> <p>11 Q. In August of 2011, you decided to stop</p> <p>12 preceptorships due to the FDA situation; correct?</p> <p>13 A. I -- I -- there was a communication that</p> <p>14 said we -- we need to look at this and we need to look</p> <p>15 at what the FDA is saying, and everybody needs to be</p> <p>16 on the same wavelength.</p> <p>17 Q. Mm-hmm. And so what -- how long did that</p> <p>18 last, that decision to suspend or interrupt your</p> <p>19 preceptorships?</p> <p>20 A. I don't -- I don't remember exactly how --</p> <p>21 how long did it last or if I ever went back and did a</p> <p>22 consultation in other -- other regards. It's -- it</p> <p>23 was just a gen- -- probably a general concern from all</p> <p>24 sides.</p>	<p style="text-align: right;">Page 28</p> <p>1 Q. (By Mr. De La Cerda) Do you remember ever</p> <p>2 discussing this FDA issue with doctors during a</p> <p>3 consultation on behalf of Ethicon?</p> <p>4 A. I -- I don't remember that.</p> <p>5 Q. Okay. Do you remember discussing this issue</p> <p>6 at all with any doctors in regard to Ethicon products?</p> <p>7 MR. SNELL: Objection, form.</p> <p>8 Go ahead.</p> <p>9 A. I don't -- I don't remember specifics of</p> <p>10 talking to a specific doctor or being at a conference</p> <p>11 just talking about -- about this.</p> <p>12 I don't even remember if it was 2007, 2008,</p> <p>13 or -- I don't remember which time frame it was. I</p> <p>14 am -- you know, I became aware of this, that I say at</p> <p>15 one point we need to stop or we need to review, we</p> <p>16 need to revise it, or we need to look at it, but it</p> <p>17 was never like, oh, no, I'm not teaching anymore, I'm</p> <p>18 not demonstrating anymore for you.</p> <p>19 Q. (By Mr. De La Cerda) Mm-hmm.</p> <p>20 A. That's what I can recall. That's the best</p> <p>21 of my recollection right now.</p> <p>22 Q. Why is it important when the FDA puts out a</p> <p>23 warning, like they did in 2011, to investigate and</p> <p>24 look into what -- the reason behind the warning?</p>
<p style="text-align: right;">Page 27</p> <p>1 Q. Okay. Just to make sure. So you're unsure</p> <p>2 whether, in August of 2011 when you decided to stop</p> <p>3 the preceptorships due to the FDA concern, you're</p> <p>4 unsure whether you went back to consulting for Ethicon</p> <p>5 after that point?</p> <p>6 A. Yeah, I --</p> <p>7 MR. SNELL: Objection to form.</p> <p>8 Go ahead.</p> <p>9 A. -- I did -- I did not cut completely at that</p> <p>10 time and actually it was -- it was me relating, I</p> <p>11 believe, to Bob Zipfel, who was the professional</p> <p>12 education manager --</p> <p>13 Q. (By Mr. De La Cerda) You said Bob Zipfel?</p> <p>14 A. Zipfel, Z-i-p-f-e-l.</p> <p>15 -- relating that we -- we need to get clear</p> <p>16 on the -- on the message and we need to include</p> <p>17 whatever is out there and be transpiring about it.</p> <p>18 Q. And so what was it that you decided, along</p> <p>19 with Ethicon, to make clear about the message</p> <p>20 involving this issue?</p> <p>21 MR. SNELL: Objection, form, Ethicon.</p> <p>22 A. As far as I remember from my side, it was</p> <p>23 let's -- let's look at this. It was -- that's more of</p> <p>24 the attitude that I can recall.</p>	<p style="text-align: right;">Page 29</p> <p>1 MR. SNELL: Form.</p> <p>2 A. It's because the results and the clinical</p> <p>3 experience that we're getting was different from what</p> <p>4 we were seeing in those -- in those reports.</p> <p>5 Q. (By Mr. De La Cerda) Okay. So the FDA</p> <p>6 warning came out in July of 2011, was that a</p> <p>7 surprise to you?</p> <p>8 A. It was -- it was a surprise in 2008 and it</p> <p>9 was in 2011. What I -- what I thought is evidence is</p> <p>10 going to come in and is going to show -- it's going to</p> <p>11 solve this difference that a group of doctors may have</p> <p>12 with other group of doctors.</p> <p>13 Q. You're familiar with the Abbott study that</p> <p>14 came out -- it came out probably in 2014, I think.</p> <p>15 Abbott -- the lead author is Abbott, Mickey Karram is</p> <p>16 one of the authors as well. And one of the</p> <p>17 discussions they have is that many times when -- I</p> <p>18 think about half the time, at least -- when a patient</p> <p>19 has a complication involving a mesh implant, whether</p> <p>20 it be a sling or a pelvic organ prolapse mesh, they do</p> <p>21 not return to the physician that implanted it.</p> <p>22 Are you aware of that phenomenon?</p> <p>23 MR. SNELL: I'm going to object to the</p> <p>24 foundation on that.</p>

8 (Pages 26 to 29)

Jaime Sepulveda, M.D.

Page 30	Page 32
<p>1 Go ahead.</p> <p>2 A. I -- I've heard about that. I never</p> <p>3 believed that that's the case.</p> <p>4 Q. (By Mr. De La Cerda) Okay. And why is</p> <p>5 that?</p> <p>6 A. Because of my own experience, because of</p> <p>7 my -- the experience that I have heard from my</p> <p>8 colleagues. That's -- that's not what our experience</p> <p>9 is.</p> <p>10 You -- you may have a small percentage that</p> <p>11 may not come back, but in my community, for example,</p> <p>12 we all know, we all communicate. There are four, five</p> <p>13 board-certified female pelvic medicine in the whole</p> <p>14 stretch all the way to Boca from here. We know each</p> <p>15 other and -- and the doctors also communicate with us,</p> <p>16 so there is a lot of communication there.</p> <p>17 If there is a loss to follow up, it might be</p> <p>18 on the clinic setting, when you have these clinics,</p> <p>19 other -- other types of settings, but not in the</p> <p>20 private-practice setting.</p> <p>21 Q. If a patient went to go receive treatment</p> <p>22 for a complication in a different city that's</p> <p>23 something like Dallas, for example, would you</p> <p>24 necessarily find out about that?</p>	<p>1 study? Like have you actually reviewed it?</p> <p>2 A. I -- I did not read that study complete, no.</p> <p>3 Q. Okay. Then I'm going to move on to another</p> <p>4 subject then.</p> <p>5 Going back to acting as a consultant, have</p> <p>6 you ever acted as a consultant for any other</p> <p>7 pharmaceutical or medical device company?</p> <p>8 A. For pharmaceuticals, I work for ALZA</p> <p>9 Pharmaceuticals.</p> <p>10 Q. Is that --</p> <p>11 A. A-L-Z-A. When they came -- they came in</p> <p>12 with a new anticholinergic.</p> <p>13 Q. I'm sorry, what is that?</p> <p>14 A. ALZA, A-L-Z-A, Pharmaceuticals.</p> <p>15 Q. And the drug?</p> <p>16 A. It was Ditropan XL.</p> <p>17 Q. Ditropan XL.</p> <p>18 And what was that drug for?</p> <p>19 A. For overactive bladder.</p> <p>20 Q. How long did you work as a consultant for</p> <p>21 ALZA Pharmaceutical?</p> <p>22 A. About two years.</p> <p>23 Q. And do you recall approximately when that</p> <p>24 was?</p>
Page 31	Page 33
<p>1 A. I may not -- I may not find out, but I know</p> <p>2 that most of the time it's not even dependent on the</p> <p>3 patient. They -- they come and they communicate with</p> <p>4 me. I've had patients that have gone to New York,</p> <p>5 they come back and tell me this was my experience.</p> <p>6 Q. You mentioned something interesting because</p> <p>7 you're -- and I hear this from physicians every time.</p> <p>8 I think this is our natural inclination.</p> <p>9 You mentioned in your experience you haven't</p> <p>10 seen that happen. Ultimately, you would agree that</p> <p>11 your personal experience on that issue, on whether</p> <p>12 people come back to the primary physician or not, is,</p> <p>13 at best, only anecdotal. Do you agree with that?</p> <p>14 A. It's -- it is definitely a portion that is</p> <p>15 anecdotal. I do talk to so many of my colleagues and</p> <p>16 if it's anecdotal, it repeats a lot.</p> <p>17 Q. Yeah, I get that. I mean, here you are in a</p> <p>18 community where you do actually know all these</p> <p>19 physicians that do this thing and if the general</p> <p>20 consensus is that this is what's happening, it can</p> <p>21 certainly feel like this is the reality of it. But</p> <p>22 ultimately we've got a study that was done that looked</p> <p>23 at many people -- by the way -- strike that.</p> <p>24 Are you familiar with this study, the Abbott</p>	<p>1 A. It was when I was starting the urogyne</p> <p>2 center here, so it may have been '96, '97.</p> <p>3 Q. Any other medical device or pharmaceutical</p> <p>4 companies that you've acted as a consultant for, other</p> <p>5 than ALZA and Ethicon?</p> <p>6 A. I -- oh, I worked for Ethicon on the</p> <p>7 laparoscopy area around 1994, internationally.</p> <p>8 Q. Was that just for one year?</p> <p>9 A. A year, year and a half, yes.</p> <p>10 Q. Any other consulting work for pharmaceutical</p> <p>11 or medical device companies?</p> <p>12 A. You know, I may have -- I may have had</p> <p>13 representatives from one or two companies that say I</p> <p>14 want you to go ahead and teach me how my product works</p> <p>15 and -- and teach me how -- how is it that urge</p> <p>16 incontinence is managed.</p> <p>17 And I may say, okay, and some of them may</p> <p>18 give me a check, which I ended up either giving to the</p> <p>19 Residents Fund in Puerto Rico or did something with</p> <p>20 it, but it was something sporadic.</p> <p>21 Q. Would these be some of the other mesh</p> <p>22 manufacturers, like Boston Scientific or American</p> <p>23 Medical Systems, companies like that?</p> <p>24 A. No, I did not -- I -- I never did consulting</p>

9 (Pages 30 to 33)

Jaime Sepulveda, M.D.

<p style="text-align: right;">Page 34</p> <p>1 for any other company on mesh but Ethicon.</p> <p>2 Q. Do you remem- -- do you recall the names of</p> <p>3 the companies that you did this urge incontinence work</p> <p>4 for?</p> <p>5 A. I think it may have been Detrol or --</p> <p>6 Q. Detrol?</p> <p>7 A. -- Enablex. I don't remember the name of</p> <p>8 the company.</p> <p>9 Q. Okay. And do you recall the approximate</p> <p>10 years that would have happened?</p> <p>11 A. No.</p> <p>12 Q. Okay. Now let's get to the part that's</p> <p>13 always the most tedious. What is it that you brought</p> <p>14 here today with you?</p> <p>15 A. I brought here in compliance with the papers</p> <p>16 served for the subpoena, I brought my CV --</p> <p>17 You have a copy?</p> <p>18 Q. Yes.</p> <p>19 A. -- and a USB, in which I have any file that</p> <p>20 I had on my computer that when I -- when I was at</p> <p>21 Ethicon, I just downloaded my presentations.</p> <p>22 Q. Okay.</p> <p>23 A. And there were some videos of surgeries</p> <p>24 here.</p>	<p style="text-align: right;">Page 36</p> <p>1 Q. Okay. What -- I guess what I would be most</p> <p>2 interested in is what you brought that is not on the</p> <p>3 Reliance List. Because most of -- just about</p> <p>4 everything on the Reliance List we can find.</p> <p>5 And so, first of all, these book chapters,</p> <p>6 are those referenced in the Reliance List, these books</p> <p>7 that you have listed here in -- here in front of us?</p> <p>8 A. No, they're not.</p> <p>9 Q. Okay. So are there particular portions of</p> <p>10 those books that are relevant to your opinions or is</p> <p>11 it the whole book?</p> <p>12 A. I -- I -- there are portions that are</p> <p>13 relevant to the way I see slings and meshes work.</p> <p>14 Q. Okay. Okay. And can you tell us what -- is</p> <p>15 it a chapter? Is it a particular passage or --</p> <p>16 A. They're -- they're chapters.</p> <p>17 Q. Okay. And as far as you know, they are not</p> <p>18 referenced in the Reliance List at all?</p> <p>19 A. They're -- they're not, that's why I brought</p> <p>20 them, and the same with the -- with the USB.</p> <p>21 Q. Okay. So, again, first of all, let's do</p> <p>22 this. Let's separate out the items that are not on</p> <p>23 the Reliance List so we can make sure and mark and</p> <p>24 identify those and -- so let's do that.</p>
<p style="text-align: right;">Page 35</p> <p>1 Q. Okay.</p> <p>2 A. And I brought my biomechanics books and the</p> <p>3 book that Ethicon put together for -- about Gynemesh</p> <p>4 and Prolift, and I did -- the one on Gynemesh is about</p> <p>5 my slides.</p> <p>6 And I -- but all the materials that were</p> <p>7 cited in my report and materials for prolapse, my</p> <p>8 materials for case specifics for tomorrow,</p> <p>9 depositions, and the Prolift monograph.</p> <p>10 Q. Okay. And that's it?</p> <p>11 A. I am missing the white paper on</p> <p>12 hydrodissection. That I could not find at all. I</p> <p>13 will make it my business to provide to you.</p> <p>14 MR. SNELL: Peter, I think we provided --</p> <p>15 there's thumb drives that my office did, too.</p> <p>16 MR. DE LA CERDA: Are those all -- those are</p> <p>17 the case-specific ones?</p> <p>18 MR. SNELL: Case and general.</p> <p>19 Q (By Mr. De La Cerda) Okay. So that we're</p> <p>20 not taxing the court reporter too much on copying</p> <p>21 and the like -- first of all, are the materials that</p> <p>22 you brought, other than the books, are those all</p> <p>23 copies?</p> <p>24 A. Yes.</p>	<p style="text-align: right;">Page 37</p> <p>1 So the books that are here, these are the</p> <p>2 ones not on the Reliance List; right?</p> <p>3 A. Yes, sir.</p> <p>4 Q. And then you've got -- and I'm going to mark</p> <p>5 each of these in a second-- the USB that you brought;</p> <p>6 correct?</p> <p>7 A. Yes.</p> <p>8 Q. Okay. Anything else, other than those and</p> <p>9 other than the case-specific USBs that you brought,</p> <p>10 anything else that is not on the Reliance List?</p> <p>11 A. The only one missing that I -- that I didn't</p> <p>12 bring today that I'm -- I made my best effort to bring</p> <p>13 you is the white paper that I wrote on hydrodissection</p> <p>14 along with Dr. Lucente and -- yeah.</p> <p>15 MR. DE LA CERDA: Okay. So as far as</p> <p>16 marking these, anything -- any particular way you</p> <p>17 want to -- you want to do this, Burt?</p> <p>18 MR. SNELL: It doesn't matter. This stuff</p> <p>19 here is like all general stuff, from his general</p> <p>20 reports and the Reliance List, and I think it's</p> <p>21 probably duplicative of the hard copies and also</p> <p>22 specific citations in the materials. I was just</p> <p>23 trying to sort out --</p> <p>24 MR. DE LA CERDA: The case-specific --</p>

10 (Pages 34 to 37)

Jaime Sepulveda, M.D.

<p style="text-align: right;">Page 38</p> <p>1 MR. SNELL: We sent so many cases to the</p> <p>2 thumb drives and stuff like that over time. This</p> <p>3 is general. If you want a copy -- I don't even</p> <p>4 know what's on these. I know they reproduced --</p> <p>5 I think they were supposed to reproduce the</p> <p>6 materials list, but I haven't checked them to</p> <p>7 see.</p> <p>8 MR. DE LA CERDA: Okay.</p> <p>9 MR. SNELL: I mean, I agree, I think you</p> <p>10 ought to mark definitely the stuff that was just</p> <p>11 kind of general -- general impression, the</p> <p>12 general stuff that he brought.</p> <p>13 MR. DE LA CERDA: Yeah.</p> <p>14 MR. SNELL: And if you want to -- mark</p> <p>15 whatever you want, you know.</p> <p>16 MR. DE LA CERDA: Yeah.</p> <p>17 MR. SNELL: These just have his reports and,</p> <p>18 like he said, everything that he cited -- here's</p> <p>19 some articles in here. You can tell him, those</p> <p>20 are probably cited within there.</p> <p>21 THE WITNESS: This is cited and this is</p> <p>22 cited, this is cited, too. This is a monograph.</p> <p>23 These two are new. These two are new.</p> <p>24 MR. SNELL: Is there anything in this?</p>	<p style="text-align: right;">Page 40</p> <p>1 mark that.</p> <p>2 A. This -- this is all medical literature.</p> <p>3 Q. Okay. So of the stuff that we've got here,</p> <p>4 what -- we have a stack here that's medical</p> <p>5 literature.</p> <p>6 A. Yes.</p> <p>7 Q. Are any of the binders medical literature?</p> <p>8 A. All of it.</p> <p>9 MR. SNELL: It's all literature. It's the</p> <p>10 stuff cited directly in his reports.</p> <p>11 MR. DE LA CERDA: Okay.</p> <p>12 MR. SNELL: Do you use footnotes or --</p> <p>13 THE WITNESS: Yes, I did. Every footnote --</p> <p>14 MR. SNELL: It should correspond in here.</p> <p>15 MR. DE LA CERDA: And then this stack here</p> <p>16 that I've got is all not in the Reliance List;</p> <p>17 right?</p> <p>18 MR. SNELL: I will say with the -- I'm about</p> <p>19 99 percent sure that this would have been. The</p> <p>20 Prolift monograph, surgeons' monograph is</p> <p>21 definitely on his materials list and he's</p> <p>22 referenced that before. This is his actual --</p> <p>23 this is your actual preceptor book. I don't know</p> <p>24 what you called it.</p>
<p style="text-align: right;">Page 39</p> <p>1 Here.</p> <p>2 THE WITNESS: This is not cited. Cited,</p> <p>3 cited.</p> <p>4 MR. DE LA CERDA: I think we're going to</p> <p>5 have to do this the long way.</p> <p>6 Q. (By Mr. De La Cerda) Okay. All right.</p> <p>7 So here's what I want to do. Just to make --</p> <p>8 because I don't want to miss anything, because it</p> <p>9 looks like you might have some newer stuff. Maybe</p> <p>10 you looked at some additional research or something</p> <p>11 and found some newer stuff, but what I want to do</p> <p>12 is, let's just -- I want to stack it by category and</p> <p>13 then I'll mark each stack.</p> <p>14 So the easiest way to do it, for me, at</p> <p>15 least, is do it by -- you know, we do ours like this,</p> <p>16 too. We're going to do it by stacks that involve</p> <p>17 certain subject matters, like, for example, everything</p> <p>18 you've brought today that is a medical literature,</p> <p>19 let's put that all into one stack and I'm going to</p> <p>20 mark that. Okay? And then everything you brought</p> <p>21 today that would be Ethicon documents, internal</p> <p>22 documents, we'll -- we'll mark that. And then</p> <p>23 everything you brought today that would be depositions</p> <p>24 or testimony that you reviewed and relied on, we'll</p>	<p style="text-align: right;">Page 41</p> <p>1 THE WITNESS: It's the book that Ethicon</p> <p>2 made on Gynemesh and Prolift and they -- and I</p> <p>3 put together the first one.</p> <p>4 MR. SNELL: I think that that's on his</p> <p>5 materials list, too, but just in case, I mean he</p> <p>6 brought that. That's his actual one.</p> <p>7 The Surgeons' Resource Monograph, I know for</p> <p>8 a fact, has got to be on there.</p> <p>9 MR. DE LA CERDA: So what I'm going to do</p> <p>10 is --</p> <p>11 MR. SNELL: He brought that. That's</p> <p>12 obviously his originals.</p> <p>13 Q. (By Mr. De La Cerda) I'm not going to</p> <p>14 mark these, I'm just going to identify them.</p> <p>15 So today you brought with you the Gynecare</p> <p>16 Prolift and the Gynecare Gynemesh Preceptor</p> <p>17 Presentation Kit; correct?</p> <p>18 A. Yes.</p> <p>19 Q. And these are your -- this is your original?</p> <p>20 A. Yes.</p> <p>21 Q. Now, do you have this available at all</p> <p>22 electronically?</p> <p>23 A. No.</p> <p>24 MR. DE LA CERDA: Okay. Do you know if</p>

11 (Pages 38 to 41)

Jaime Sepulveda, M.D.

Page 42	Page 44
<p>1 these are available electronically?</p> <p>2 THE WITNESS: There might be a CD.</p> <p>3 MR. SNELL: I think if you open the inside</p> <p>4 cover, there are CDs.</p> <p>5 THE WITNESS: There might be a CD there,</p> <p>6 yes.</p> <p>7 MR. DE LA CERDA: Because what I would like</p> <p>8 to do is get a copy of this, just electronically,</p> <p>9 because this -- so it's not copied -- so the</p> <p>10 court reporter doesn't have to copy it.</p> <p>11 So how do you want to do that?</p> <p>12 MR. SNELL: Do you want -- can I take it?</p> <p>13 THE WITNESS: Yeah. Send it back because</p> <p>14 it's the only one I have.</p> <p>15 MR. SNELL: I mean, there's two ways. We</p> <p>16 can either have the court reporter do it and then</p> <p>17 it's going through multiple people's hands or if</p> <p>18 you give it to me, I'll make color copies of</p> <p>19 everything, the cover, the back, the pages, and</p> <p>20 then I'll burn the CDs.</p> <p>21 MR. DE LA CERDA: Okay.</p> <p>22 MR. SNELL: I'll basically give you an exact</p> <p>23 copy of what you're holding and then I'll</p> <p>24 actually make a copy for myself, because I don't</p>	<p>1 A. Yes.</p> <p>2 Q. And this is medical literature that happens</p> <p>3 not to be on the Reliance List; correct?</p> <p>4 A. That's correct.</p> <p>5 MR. DE LA CERDA: So I'm marking that as</p> <p>6 Exhibit 3.</p> <p>7 (Plaintiff's Exhibit No. 3 was marked for</p> <p>8 identification.)</p> <p>9 MR. SNELL: Just for the record, since,</p> <p>10 obviously, my firm was the one who made the</p> <p>11 Reliance List, I do believe that one of those may</p> <p>12 be on there.</p> <p>13 MR. DE LA CERDA: Okay.</p> <p>14 MR. SNELL: Like the ACOG committee opinion</p> <p>15 on vaginal prolapse mesh, I'm pretty sure that's</p> <p>16 on the materials list, if I even have his</p> <p>17 materials list.</p> <p>18 You can keep doing that.</p> <p>19 MR. DE LA CERDA: Okay.</p> <p>20 MR. SNELL: But I'm pretty sure that would</p> <p>21 have been sent.</p> <p>22 MR. DE LA CERDA: Prosima IFU, I'm sure that</p> <p>23 was on the Reliance List.</p> <p>24 MR. SNELL: All that stuff is on the</p>
Page 43	Page 45
<p>1 have a copy of that exact one, and then I'll give</p> <p>2 it back to the doctor.</p> <p>3 MR. DE LA CERDA: Okay. So then that --</p> <p>4 MR. SNELL: Let's make a record for that, a</p> <p>5 note for that.</p> <p>6 MR. DE LA CERDA: So for the record, then,</p> <p>7 that will be Exhibit 1. I'm just going to put</p> <p>8 this here for now.</p> <p>9 MR. SNELL: I will make a note I need to</p> <p>10 take that and copy it.</p> <p>11 MR. DE LA CERDA: So for the record,</p> <p>12 Exhibit 1 is the Gynecare Prolift and Gynecare</p> <p>13 Gynemesh PS Preceptor Presentation Kit.</p> <p>14 (Plaintiff's Exhibit No. 1 was marked for</p> <p>15 identification.)</p> <p>16 MR. DE LA CERDA: Exhibit 2 is going to be</p> <p>17 Dr. Sepulveda's original Prolift Surgeon's</p> <p>18 Resource Monograph.</p> <p>19 (Plaintiff's Exhibit No. 2 was marked for</p> <p>20 identification.)</p> <p>21 Q. (By Mr. De La Cerda) Now, Exhibit 3, I'm</p> <p>22 going to mark, these are -- this is medical</p> <p>23 literature that you've gathered, Dr. Sepulveda;</p> <p>24 correct?</p>	<p>1 Reliance List.</p> <p>2 THE WITNESS: I can take that back.</p> <p>3 MR. SNELL: All the professional education</p> <p>4 slides, those are on there.</p> <p>5 Q. (By Mr. De La Cerda) All of these are</p> <p>6 also on the Reliance List; right? Okay. So I'm not</p> <p>7 going to mark those.</p> <p>8 And then, now, books. Let's go through each</p> <p>9 of these.</p> <p>10 First of all, I'm looking at a book called</p> <p>11 "Biomechanics: Mechanical Properties of Living</p> <p>12 Tissues," the Second Edition, published by Springer</p> <p>13 and the author is Y.C. Fung, F-u-n-g.</p> <p>14 Do you have specific chapters that you can</p> <p>15 identify within this book that you rely on?</p> <p>16 A. Yes. Chapter 7.</p> <p>17 Q. Okay. Any others?</p> <p>18 A. No, 7.</p> <p>19 MR. DE LA CERDA: Okay. So I'm going to</p> <p>20 mark this book as Exhibit 4 and then if we can</p> <p>21 just get a copy of chapter 7, just chapter 7,</p> <p>22 then the book can be returned.</p> <p>23</p> <p>24</p>

12 (Pages 42 to 45)



Jaime Sepulveda, M.D.

Page 46	Page 48
<p>1 (Plaintiff's Exhibit No. 4 was marked for 2 identification.) 3 Q. (By Mr. De La Cerda) You've also brought 4 a book entitled "Introductory Biomechanics From 5 Cells to Organisms." The author is -- or authors 6 are C. Ross Ethier, E-t-h-i-e-r, and Craig A. 7 Simmons. It looks like this is published by 8 Cambridge University Press. 9 Are there any chapters or passages within 10 this book -- 11 A. Yes. 12 Q. -- that supports your opinions? 13 A. Chapter 9. 14 Q. Okay. Great. I'll mark this book, 15 "Introductory Biomechanics," as Exhibit 5 and then 16 we'll just get a copy of that particular chapter you 17 referenced, chapter 9. 18 (Plaintiff's Exhibit No. 5 was marked for 19 identification.) 20 MR. DE LA CERDA: Another book you brought 21 is called "Biomaterials and Biomedical 22 Engineering" published by Trans, T-r-a-n-s, Tech, 23 T-e-c-h, Publications. This one is edited by W. 24 Ahmed, A-h-m-e-d, N. Ali, A-l-i, and A. Öchsner.</p>	<p>1 on his materials list. For some reason these 2 don't have page numbers, but it's under "other 3 materials." 4 MR. DE LA CERDA: Okay. 5 MR. SNELL: I put a check next to it. 6 MR. DE LA CERDA: Okay. Great. All right. 7 Q. (By Mr. De La Cerda) Now, the last bit of 8 materials that you brought with you are various 9 thumb drives. What are these thumb drives? 10 A. These are the thumb drives that have the 11 articles that you see in these binders. 12 Q. Oh, I see. Okay. So actually, it would be 13 nice to go ahead and mark these. So we have four 14 different thumb drives. Each of these thumb drives is 15 actually labeled with a product, as well. So there is 16 Sepulveda TVT - TVT-O, Sepulveda TVT-S, Sepulveda 17 Prolift, and then there's another Sepulveda TVT-S, I 18 don't know if that's just a repeat, but I'll mark each 19 of these with its own sticker. We're on 6. 20 So I'm marking as Exhibit 7 to your 21 deposition the thumb drive that has Sepulveda TVT and 22 TVT-O and this thumb drive contains reliance materials 23 and materials cited in your report; correct? 24 A. Yes.</p>
Page 47	Page 49
<p>1 It's O-umlaut-c-h-s-n-e-r. 2 And I'm marking this book as Exhibit 6. 3 (Plaintiff's Exhibit No. 6 was marked for 4 identification.) 5 Q. (By Mr. De La Cerda) Are there any 6 chapters or passages in that book that you rely on? 7 A. Yes. 8 Q. What are they? 9 A. Chapter 12. 10 Q. Okay. Thank you. And then we'll get a copy 11 of that and return the original book to you. 12 Okay. Now, you've also -- the other 13 material other than the case-specific materials, the 14 other material -- materials you've brought with you 15 have all been cited either in your report or in your 16 Reliance List; correct? 17 A. That's correct. 18 Q. Okay. Great. Now the last thing I'm going 19 to do -- 20 MR. SNELL: Peter, one thing -- 21 MR. DE LA CERDA: Yes. 22 MR. SNELL: -- for clarification. I had 23 mentioned I thought the ACOG physician statement 24 from 2011 on transvaginal POP mesh was in. It's</p>	<p>1 (Plaintiff's Exhibit No. 7 was marked for 2 identification.) 3 Q. (By Mr. De La Cerda) Then I'm marking as 4 Exhibit 8, Sepulveda TVT-S, and these are also 5 documents referenced in your Reliance List and your 6 report relating to TVT-S; correct? 7 A. Yes. 8 (Plaintiff's Exhibit No. 8 was marked for 9 identification.) 10 Q. (By Mr. De La Cerda) Then I'm marking as 11 Exhibit 9 to your deposition the thumb drive that 12 has -- that's marked Sepulveda Prolift, and these 13 are materials referenced in your Reliance List and 14 your report for Prolift; correct? 15 A. Yes. 16 (Plaintiff's Exhibit No. 9 was marked for 17 identification.) 18 MR. DE LA CERDA: Do you know why there is a 19 second TVT-S one? 20 MR. SNELL: I have no idea. 21 MR. DE LA CERDA: I'll just mark it as 22 another one. 23 MR. SNELL: Somebody might have just made 24 two copies. I can open it up and look at it real</p>

13 (Pages 46 to 49)



Jaime Sepulveda, M.D.

Page 50	Page 52
<p>1 quick.</p> <p>2 MR. DE LA CERDA: I'll just mark it.</p> <p>3 Then I'm also marking as Exhibit 10 to your</p> <p>4 deposition a second thumb drive labeled</p> <p>5 "Sepulveda TVT-S," which I assume is also</p> <p>6 reliance materials and documents referenced</p> <p>7 within your report; correct?</p> <p>8 A. Yes.</p> <p>9 (Plaintiff's Exhibit No. 10 was marked for</p> <p>10 identification.)</p> <p>11 MR. DE LA CERDA: Case-specific, they can</p> <p>12 deal with that.</p> <p>13 THE WITNESS: I need to -- to -- I did not</p> <p>14 remember seeing the Bianchi-Ferraro --</p> <p>15 THE COURT REPORTER: I'm sorry, the --</p> <p>16 THE WITNESS: I do not remember seeing the</p> <p>17 Bianchi-Ferraro paper on TVT-Secur and TVT-O.</p> <p>18 MR. SNELL: Is it in this pile?</p> <p>19 THE WITNESS: I want to double-check that</p> <p>20 because I --</p> <p>21 MR. SNELL: Bianchi-Ferraro?</p> <p>22 THE WITNESS: Bianchi-Ferraro, which I</p> <p>23 referred to in the Garcia deposition.</p> <p>24 MR. SNELL: Okay. This is other literature.</p>	<p>1 Exhibit 11 contains additional medical literature that</p> <p>2 you're relying on for your opinions; is that right?</p> <p>3 A. Yes.</p> <p>4 Q. Okay. We'll just leave it at that and then,</p> <p>5 of course, if you need to refer to any of it during</p> <p>6 your deposition --</p> <p>7 A. And this is the paper that I was just</p> <p>8 referring about the Bianchi-Ferraro on TVT-O and</p> <p>9 TVT-S.</p> <p>10 MR. DE LA CERDA: Okay. So I'll mark this</p> <p>11 one separately as Exhibit 12.</p> <p>12 MR. SNELL: Is that one in your report, do</p> <p>13 you know?</p> <p>14 THE WITNESS: No, but I refer to it on the</p> <p>15 Garcia deposition.</p> <p>16 (Plaintiff's Exhibit No. 12 was marked for</p> <p>17 identification.)</p> <p>18 MR. DE LA CERDA: For purposes of the</p> <p>19 record, Exhibit 12 is a article entitled</p> <p>20 "Randomized controlled trial comparing TVT-O and</p> <p>21 TVT-S for the treatment of stress urinary</p> <p>22 incontinence: 2-year results."</p> <p>23 Is it okay if I clip --</p> <p>24 A. Yes.</p>
Page 51	Page 53
<p>1 You want to give that to him. That's additional.</p> <p>2 THE WITNESS: Additional.</p> <p>3 MR. DE LA CERDA: Oh, okay. All right. I'm</p> <p>4 also marking as Exhibit 11 medical literature</p> <p>5 that you've handed to me.</p> <p>6 (Plaintiff's Exhibit No. 11 was marked for</p> <p>7 identification.)</p> <p>8 Q (By Mr. De La Cerda) What is this medical</p> <p>9 literature?</p> <p>10 A. That is -- this is medical literature about</p> <p>11 the -- one case report of clear cell carcinoma of the</p> <p>12 vagina and there's -- in a patient that has had a</p> <p>13 midurethral sling. This is the response to that</p> <p>14 article.</p> <p>15 Q. (By Mr. De La Cerda) Okay. So this is</p> <p>16 all within Exhibit 11. So the second article within</p> <p>17 Exhibit 11 is?</p> <p>18 A. The response to this article.</p> <p>19 Q. Okay. And the third article within</p> <p>20 Exhibit 11?</p> <p>21 A. This is vaginal -- these are different</p> <p>22 papers, but they're not directly related to this one.</p> <p>23 Q. That's okay. So these are all -- I guess</p> <p>24 just to make sure just for purposes of the record,</p>	<p>1 Q. (By Mr. De La Cerda) Just for now, and</p> <p>2 then if you need to look at them, of course.</p> <p>3 A. And I gave you a copy of my CV --</p> <p>4 Q. Yes.</p> <p>5 A. -- without my home address.</p> <p>6 Q. Okay. I've got one here and if you like, I</p> <p>7 can use this one for the record.</p> <p>8 A. Yes, I just made it available to you in</p> <p>9 case ...</p> <p>10 MR. SNELL: Is that the same thing?</p> <p>11 THE WITNESS: Yes, that's the one. The</p> <p>12 Bianchi-Ferraro has been referred already on</p> <p>13 this.</p> <p>14 MR. SNELL: Footnote 117.</p> <p>15 Q. (By Mr. De La Cerda) Okay. What I'm</p> <p>16 going to do is I'm going to mark as Exhibit 13 to</p> <p>17 your deposition your CV.</p> <p>18 (Plaintiff's Exhibit No. 13 was marked for</p> <p>19 identification.)</p> <p>20 Q (By Mr. De La Cerda) So I'm marking as</p> <p>21 Exhibit 13, that's your -- is that your current</p> <p>22 curriculum vitae?</p> <p>23 A. Yes.</p> <p>24 Q. And is that, to the best of your knowledge,</p>

14 (Pages 50 to 53)

Jaime Sepulveda, M.D.

Page 54	Page 56
<p>1 current?</p> <p>2 A. It is -- it is current.</p> <p>3 Q. Okay. Anything else -- anything on it that</p> <p>4 you know of that needs to be updated, corrected,</p> <p>5 edited, anything like that?</p> <p>6 A. On my report that I'm the principal</p> <p>7 investigator at the Fibroid Registry research project,</p> <p>8 that project was completed and closed.</p> <p>9 Q. Okay. And is that the only thing on your CV</p> <p>10 that you know of that would need to be corrected?</p> <p>11 A. It was the only research project that was</p> <p>12 open.</p> <p>13 (Plaintiff's Exhibit No. 14 was marked for</p> <p>14 identification.)</p> <p>15 Q. (By Mr. De La Cerda) Okay. I'm also</p> <p>16 marking as Exhibit 14 to your deposition your</p> <p>17 Reliance List for the general report.</p> <p>18 This is what I've received as your Reliance</p> <p>19 List. Does that appear to be a true and correct copy</p> <p>20 of it?</p> <p>21 MR. SNELL: Is this Exhibit 14?</p> <p>22 MR. DE LA CERDA: Yeah.</p> <p>23 A. I don't see any discrepancies overall in</p> <p>24 this list from what I have here.</p>	<p>1 (Thereupon, a recess was taken from</p> <p>2 9:24 a.m. until 9:26 a.m., after which the</p> <p>3 following proceedings were held:)</p> <p>4 Q. (By Mr. De La Cerda) All right. Doctor,</p> <p>5 we're back on the record.</p> <p>6 When -- when was it that you were first</p> <p>7 contacted regarding the general opinions that you have</p> <p>8 as to these products that we're here today for?</p> <p>9 A. For -- for the -- for the MDL, around</p> <p>10 September. We spoke around September.</p> <p>11 Q. September --</p> <p>12 A. Last year.</p> <p>13 Q. -- of last year, 2015?</p> <p>14 A. Yes.</p> <p>15 Q. And do you recall who you talked to first?</p> <p>16 A. I -- I spoke to Burt.</p> <p>17 Q. Okay. And was the topic discussed that you</p> <p>18 would be providing general opinions as to these</p> <p>19 specific products: TVT, TVT-O, Proxima, Prolift and</p> <p>20 Gynemesh?</p> <p>21 A. That's correct.</p> <p>22 Q. And what was the scope of your assignment</p> <p>23 for this particular -- for your opinions in this case,</p> <p>24 to your understanding?</p>
Page 55	Page 57
<p>1 Q. (By Mr. De La Cerda) Okay. Great. Now</p> <p>2 I'm going to show you what I've marked as Exhibit 15</p> <p>3 to your deposition.</p> <p>4 (Plaintiff's Exhibit No. 15 was marked for</p> <p>5 identification.)</p> <p>6 Q. (By Mr. De La Cerda) Does this appear to</p> <p>7 be a true and correct copy of your expert report,</p> <p>8 your general expert report, on Gynemesh, Prolift and</p> <p>9 Proxima?</p> <p>10 A. This is accurate and correct.</p> <p>11 (Plaintiff's Exhibit No. 16 was marked for</p> <p>12 identification.)</p> <p>13 Q. (By Mr. De La Cerda) Okay. And now I'm</p> <p>14 showing you what I've marked as Exhibit 16 to your</p> <p>15 deposition. Does this appear to be a true and</p> <p>16 correct copy of your general expert report on TVT</p> <p>17 and TVT-O?</p> <p>18 A. It is a correct copy.</p> <p>19 MR. DE LA CERDA: We've been going now for</p> <p>20 about an hour. Are you okay to continue or do</p> <p>21 you want to take a break?</p> <p>22 THE WITNESS: Let's take a bladder break and</p> <p>23 we'll come back in five.</p> <p>24 MR. DE LA CERDA: Sounds good.</p>	<p>1 A. Yes, I understand the scope is to -- to</p> <p>2 review the literature and -- and go over things that I</p> <p>3 have read for -- throughout the years.</p> <p>4 Q. Were there certain things that you were to</p> <p>5 focus on within the context of your opinions?</p> <p>6 A. The --</p> <p>7 THE COURT REPORTER: I'm sorry, did you --</p> <p>8 MR. SNELL: Objection, form. I just say</p> <p>9 "form," but that means objection, form. I try to</p> <p>10 cut down your typing on the record.</p> <p>11 A. The randomized controlled trials concentrate</p> <p>12 in the evidence.</p> <p>13 Q. (By Mr. De La Cerda) What about internal</p> <p>14 documents, was there any focus that you were to</p> <p>15 place on the substance or the significance of</p> <p>16 Ethicon's internal documents in forming your</p> <p>17 opinions?</p> <p>18 A. No. It's -- I have received -- just to be</p> <p>19 accurate in my response, I received, probably a year</p> <p>20 ago, internal documents, but not as part of this.</p> <p>21 Q. Okay. So your focus really was and your</p> <p>22 opinions here was to provide those opinions based on</p> <p>23 literature as opposed to what was found in the</p> <p>24 internal documents; is that fair?</p>

15 (Pages 54 to 57)

Jaime Sepulveda, M.D.

Page 58	Page 60
<p>1 MR. SNELL: Form.</p> <p>2 A. Based on the -- on the evidence, on the</p> <p>3 scientific evidence.</p> <p>4 Q. (By Mr. De La Cerda) As opposed to the</p> <p>5 internal documents; right?</p> <p>6 A. The internal documents are not -- are not</p> <p>7 included on -- on this review or -- because it's a</p> <p>8 scientific review.</p> <p>9 Q. I guess you haven't completed all -- well,</p> <p>10 let me just ask.</p> <p>11 Have you completed all of your work on this</p> <p>12 case?</p> <p>13 A. Yes. So far from my Reliance List and this</p> <p>14 is -- this is the product.</p> <p>15 Q. Do you currently have any further work</p> <p>16 planned?</p> <p>17 A. As -- as information may be required,</p> <p>18 I'll -- I'll review the papers, I'll review scientific</p> <p>19 literature, and everything that is coming up.</p> <p>20 Q. So -- but as far as anything specific</p> <p>21 planned, is there any additional -- is there any</p> <p>22 additional task that you have planned? Other than,</p> <p>23 you know, tomorrow we have depositions for the</p> <p>24 case-specific, but other than the depositions coming</p>	<p>1 A. I can make copies again of it, but I did</p> <p>2 prepare your invoices. My invoices to -- I put it in</p> <p>3 a folder, they were neatly organized, the hours. I --</p> <p>4 I just cannot find it, honestly cannot find it.</p> <p>5 Q. (By Mr. De La Cerda) Okay. So what we'll</p> <p>6 do is when you do find it, you'll agree to provide</p> <p>7 that to us?</p> <p>8 A. Absolutely.</p> <p>9 Q. Okay. And so --</p> <p>10 MR. SNELL: Why don't we save an exhibit</p> <p>11 number on the record, and I'll produce that, but</p> <p>12 I think he probably has a good idea as to how</p> <p>13 many hours he spent.</p> <p>14 MR. DE LA CERDA: Okay. So what I'm going</p> <p>15 to do is, I'm reserving Exhibit 17 for the</p> <p>16 invoices that Dr. Sepulveda has prepared</p> <p>17 reflecting his work and his opinions for this</p> <p>18 case.</p> <p>19 (Plaintiff's Exhibit No. 17 was marked for</p> <p>20 identification.)</p> <p>21 Q. (By Mr. De La Cerda) First of all, do you</p> <p>22 have an idea of approximately how many hours you've</p> <p>23 spent preparing your opinions?</p> <p>24 A. It's -- an approximate is about 120 hours.</p>
Page 59	Page 61
<p>1 up tomorrow, are there any specific tasks that you</p> <p>2 have planned relating to your opinions in this case?</p> <p>3 A. No, this is -- this is my -- my product.</p> <p>4 MR. SNELL: I'll make a note for the record.</p> <p>5 As plaintiff's experts' depositions are coming</p> <p>6 in, I know there are still depositions going on</p> <p>7 today, tomorrow, we'll send those to him, and if</p> <p>8 he has commentary or his opinions are changed,</p> <p>9 then, obviously, I'll let you know.</p> <p>10 Q. (By Mr. De La Cerda) How much have you</p> <p>11 billed thus far for your general opinions involving</p> <p>12 TVT, TVT-O, Proxima, Prolift and Gynemesh?</p> <p>13 A. I have -- I have copies of the invoices that</p> <p>14 I have submitted.</p> <p>15 Is it okay if he has other -- other hours</p> <p>16 from another case, or should I just say the number of</p> <p>17 hours?</p> <p>18 MR. SNELL: Let me see what you're talking</p> <p>19 about. The invoices -- let me look at them real</p> <p>20 quick.</p> <p>21 MR. DE LA CERDA: Do you want to go off the</p> <p>22 record for a second? Let's go off the record.</p> <p>23 (Discussion held off the record.)</p> <p>24 (Mr. Sparks entered the room.)</p>	<p>1 Q. And your report mentions that you bill at</p> <p>2 \$500 an hour; right?</p> <p>3 A. Yes.</p> <p>4 Q. And so was it -- was that rate the same for</p> <p>5 all 120 hours that you performed --</p> <p>6 A. Yes.</p> <p>7 Q. And was -- do you know whether your invoice,</p> <p>8 did it break down the tasks that you were performing,</p> <p>9 did it break it down by product?</p> <p>10 A. No, it's all MDL.</p> <p>11 Q. Okay. Was it broken down by, for example,</p> <p>12 reviewing documents, meeting -- meetings with defense</p> <p>13 counsel, deposition time? Was it broken down in any</p> <p>14 way like that?</p> <p>15 A. No, it's just for MDL, all the time that</p> <p>16 I've spent in putting -- putting together -- putting</p> <p>17 the reports together, putting -- for all the different</p> <p>18 products all into one MDL.</p> <p>19 Q. Okay. So one block bill of 120 hours --</p> <p>20 A. Right.</p> <p>21 Q. -- approximately?</p> <p>22 A. That's correct. Around -- approximately.</p> <p>23 Q. Okay. Now, the types of tasks you would</p> <p>24 perform in developing your opinions, what did those</p>

16 (Pages 58 to 61)

Jaime Sepulveda, M.D.

Page 62	Page 64
<p>1 include?</p> <p>2 A. I have to write the report, I have to</p> <p>3 proofread -- proofread it, and I update it with the --</p> <p>4 with the Reliance List. I -- I do research and</p> <p>5 whatever papers I -- I find that are relevant, I just</p> <p>6 submit it and it gets added to the Reliance List.</p> <p>7 Q. Okay.</p> <p>8 A. I also -- I review the case specifics and</p> <p>9 that included seven -- seven cases in which -- in</p> <p>10 which depositions and medical records and summaries</p> <p>11 were reviewed.</p> <p>12 Q. Okay.</p> <p>13 A. And then the time, getting together, getting</p> <p>14 prepared for this.</p> <p>15 Q. Anything else that you can think of?</p> <p>16 A. That would be at a later time because we got</p> <p>17 ready yesterday and the time today.</p> <p>18 Q. Let's talk a little about what you just</p> <p>19 mentioned. Does the 120 -- approximately 120 hours</p> <p>20 that you mentioned, does that include all of your work</p> <p>21 for the case-specific?</p> <p>22 A. Yes.</p> <p>23 Q. Okay. Do you know approximately how much</p> <p>24 you spent -- how much time you spent as to each</p>	<p>1 A. Yes.</p> <p>2 Q. Anybody else?</p> <p>3 A. No.</p> <p>4 Q. In your deposition preparation, you reviewed</p> <p>5 documents; is that right?</p> <p>6 A. Yes.</p> <p>7 Q. Okay. Are those the documents that we have</p> <p>8 here that we've marked today?</p> <p>9 A. Yes.</p> <p>10 Q. Okay.</p> <p>11 A. And -- yeah, all this has been marked.</p> <p>12 Q. Do you have any rough estimate of how much</p> <p>13 more you anticipate billing before trial?</p> <p>14 A. I -- I don't know when it's going to trial.</p> <p>15 It's -- as they -- as they require, I just -- I'll</p> <p>16 just review.</p> <p>17 Q. Okay. Have you ever rendered an opinion in</p> <p>18 litigation that was adverse to Johnson &amp; Johnson or</p> <p>19 Ethicon, Inc.?</p> <p>20 A. No.</p> <p>21 Q. Did you take any notes while you were doing</p> <p>22 your preparation for your opinions?</p> <p>23 A. I -- I'm a better highlighter than note</p> <p>24 taker.</p>
Page 63	Page 65
<p>1 case-specific report that you prepared?</p> <p>2 A. I -- I probably spend about, just -- just a</p> <p>3 rough, rough estimate, it's ten hours per each one,</p> <p>4 each one of them.</p> <p>5 Q. And do you know how many case-specific</p> <p>6 reports you prepared?</p> <p>7 A. Seven.</p> <p>8 Q. Seven. Okay. I know these are rough</p> <p>9 numbers here, but so seven case-specific reports at</p> <p>10 about ten hours a piece, it's about 70 hours. So the</p> <p>11 balance, the rest of that, would that be dedicated</p> <p>12 towards your general opinions as to the products</p> <p>13 involved here?</p> <p>14 A. Yes.</p> <p>15 Q. Okay. And you mentioned preparation for</p> <p>16 your deposition. When is it that you prepared for</p> <p>17 your deposition today?</p> <p>18 A. Yesterday.</p> <p>19 Q. And how long did you prepare?</p> <p>20 A. We -- we spend eight, ten hours.</p> <p>21 Q. And that's eight to ten hours that you spent</p> <p>22 with Burt Snell?</p> <p>23 A. Yes.</p> <p>24 Q. Counsel for Ethicon; right?</p>	<p>1 Q. Okay. I can never read my own notes, so I</p> <p>2 don't -- I don't even take notes.</p> <p>3 Okay. So you don't have any handwritten</p> <p>4 notes regarding your opinions; is that right?</p> <p>5 A. No, not on this.</p> <p>6 Q. You mentioned the Reliance List. Was the</p> <p>7 Reliance List originally prepared and provided to you</p> <p>8 by Ethicon counsel?</p> <p>9 A. It -- it was given by counsel, but I can</p> <p>10 tell you that most of that Reliance List is trials</p> <p>11 that are relevant enough that I have read it over</p> <p>12 time.</p> <p>13 Q. Okay. So then as you performed your own</p> <p>14 research and found additional articles, you would then</p> <p>15 submit them to Ethicon's counsel and then they would</p> <p>16 get added to the Reliance List; is that right?</p> <p>17 A. Right. That's -- whatever I want to add up,</p> <p>18 I just submit.</p> <p>19 Q. And that Reliance List is exhaustive other</p> <p>20 than a few of the articles that we've identified</p> <p>21 today, is that right, that have been marked?</p> <p>22 A. Right, that's -- this is what includes it.</p> <p>23 Q. Does your Reliance --</p> <p>24 MR. SNELL: Could I make -- let me just make</p>

17 (Pages 62 to 65)

Jaime Sepulveda, M.D.

Page 66	Page 68
<p>1 a note on the record. He did bring another thumb 2 drive with a lot of Ethicon documents and 3 materials that he had in his possession and, 4 obviously, those would go and make up part and 5 parcel of his knowledge base as well. 6 MR. DE LA CERDA: I'm glad you brought that 7 up because I forgot to mark this thumb drive. 8 THE WITNESS: Can you just take a look 9 because I want to make sure I brought the right 10 thumb drive. 11 MR. SNELL: Okay. 12 THE WITNESS: I just dump it and I really 13 never review it. 14 I'm seeing one of the slides have the name 15 of a patient. 16 MR. SNELL: How do we deal with that? 17 because it looks like an image. 18 THE WITNESS: It's an image, yeah, it has a 19 name of a patient. 20 MR. SNELL: It has to be redacted. 21 THE WITNESS: Yeah. 22 MR. SNELL: Why don't we take it off the 23 thumb drive and we can figure out how to redact 24 it.</p>	<p>1 presentation on Gynemesh, and it has the surgical 2 videos, and it has pictures of surgery that I have 3 included in those presentations. 4 MR. SNELL: Did you mention this product? 5 THE WITNESS: TVT-Secur. 6 Q. (By Mr. De La Cerda) And, apparently, 7 there are patient-identifying information on that 8 thumb drive and so that information is going to be 9 redacted and then the thumb drive will be provided 10 at a later date; correct? 11 A. There is one slide that has the patient ID. 12 MR. SNELL: What I was going to do is take 13 the file titled "Pillowing" with the 14 patient-protected information off the thumb 15 drive, put it on my local computer, and figure 16 out some time today if this law firm can redact 17 that. 18 MR. DE LA CERDA: That would be perfect. 19 MR. SNELL: But you'll have -- I mean, but 20 we'll mark the thumb drive, because I want a copy 21 of it, too. 22 MR. DE LA CERDA: Okay. 23 MR. SNELL: I'm just looking for -- is that 24 your data?</p>
Page 67	Page 69
<p>1 So Peter, just for your reference, we're 2 looking at the thumb drive Dr. Sepulveda brought. 3 There is a PowerPoint titled "Pillowing, 4 P-i-l-l-o-w-i-n-g, .ppxt, and it's got patient 5 identification information, so we'll take that 6 off the thumb drive and figure out how to redact 7 that. It looks like it's images. I can't even 8 read the name, but obviously once you open up the 9 file in realtime you can see it. 10 MR. DE LA CERDA: Okay. So for purposes of 11 the record, we're going to reserve -- 12 Did we already reserve 17? 13 THE COURT REPORTER: Yes, for -- 14 MR. SNELL: I think 17 was invoices. 15 MR. DE LA CERDA: Okay. So for purposes of 16 the record, we're going to reserve Exhibit No. 18 17 for a thumb drive that Dr. Sepulveda has brought 18 here today. 19 Q (By Mr. De La Cerda) And, for the record, 20 Dr. Sepulveda, can you tell us, generally speaking, 21 what is on the thumb drive that will be marked as 22 Exhibit 18? 23 A. It -- it has the presentations that I have 24 used for Prolift throughout the years, and it has the</p>	<p>1 THE WITNESS: Yes, that's my own data. 2 MR. SNELL: Tell him about that. 3 A. I also included data of my own 4 complications. 5 Q. (By Mr. De La Cerda) Let's discuss them. 6 Actually, you know what, we'll come to that shortly. 7 MR. SNELL: Is that the same as the earlier 8 stuff without the patient identifying -- 9 THE WITNESS: No, that's -- I put all the 10 files that have to do with it, so I had the files 11 that I use to prepare the presentation, and I 12 have the actual file slides with the 13 presentation. 14 MR. SNELL: Did you mention this product? 15 THE WITNESS: That's TVT-Secur. 16 MR. SNELL: This one? 17 THE WITNESS: And there's another 18 presentation on TVT-O. 19 MR. SNELL: Okay. Let me pull that one off. 20 Q. (By Mr. De La Cerda) Okay. And we'll 21 come back to the data on your own complications, 22 too. We'll discuss that in a moment. 23 Okay. Directing your attention back to 24 Exhibit 16 -- oh, wait. Is this report -- in</p>

18 (Pages 66 to 69)



Jaime Sepulveda, M.D.

Page 70	Page 72
<p>1 Exhibit 16 is your general report on TVT and TVT-O; 2 correct? 3 A. That's correct. 4 Q. Is this report a complete statement of all 5 general opinions that you'll express as to the TVT and 6 the TVT-O and the reasons for those opinions? 7 A. That report includes that, up to -- up to 8 today. 9 Q. So up to today, that report is a complete 10 statement of all general opinions you'll express as to 11 the TVT and TVT-O and the reasons for those opinions; 12 correct? 13 MR. SNELL: Form. 14 Go ahead. 15 A. That's correct. 16 Q. (By Mr. De La Cerda) Does this report, 17 your Reliance List, and the materials you've brought 18 today include all facts or data considered by you as 19 of today in forming your general opinions about the 20 TVT and the TVT-O? 21 A. Yes. 22 MR. SNELL: I took the one file off so you 23 can go ahead and mark that. 24 MR. DE LA CERDA: All right. So I am, for</p>	<p>1 Q. And do you currently perform surgeries to 2 correct stress urinary incontinence? 3 A. Yes. 4 Q. Now let's focus over the last ten years. 5 Over the last ten years, what surgeries have 6 you performed to correct stress urinary incontinence? 7 A. I have performed Burch procedures, TVT, 8 retropubic, and transobturator inside-out. 9 Q. Is that TVT-O? 10 A. That's correct, that's TVT-O. 11 And TVT-Secur, TVT-ABBREVO. 12 Q. Okay. Any others that you can recall 13 sitting here today? 14 A. I -- I recall doing 50 outside-in slings. 15 Q. Fifty outside-in slings. 16 A. Slings. 17 Q. Okay. Do you recall the brand of those? 18 A. That was from AMS. 19 Q. AMS. Is that the Monarc? 20 A. Monarc. 21 Q. You mentioned that you performed Burch as a 22 surgery to correct stress urinary incontinence. What 23 to you would be an indication to perform a Burch as 24 opposed to a synthetic midurethral sling?</p>
Page 71	Page 73
<p>1 the record, marking the thumb drive that we've 2 just discussed that Dr. Sepulveda brought as 3 Exhibit 18. 4 (Plaintiff's Exhibit No. 18 was marked for 5 identification.) 6 Q. (By Mr. De La Cerda) Okay. Now, Doctor, 7 directing your attention to Exhibit 15 and that's 8 your report on the Gynemesh, Prolift and Proxima; 9 correct? 10 A. Yes. 11 Q. Now, is this report a complete statement of 12 all general opinions you will express as to the 13 Gynemesh, Prolift, and Proxima and the reasons for 14 those opinions as of today? 15 A. Yes. 16 Q. And does this report, your Reliance List, 17 and the materials you brought today include all facts 18 or data considered by you in forming your general 19 opinions about the TVT and the TVT-O as of today? 20 A. Yes. 21 Q. Okay. Let's talk a little bit about your 22 practice. Where do you currently have privileges? 23 A. At South Miami Hospital, Baptist Hospital, 24 and South Miami Medical Arts Surgery Center.</p>	<p>1 A. I perform Burches rarely and I cannot -- I 2 cannot really remember off my head my last Burch. 3 Q. Why do you perform them rarely? 4 A. Because midurethral synthetic slings work 5 very well. 6 Q. Performing a synthetic midurethral sling, 7 it's a quicker procedure than a Burch; right? 8 A. It's just more than -- than quicker. It 9 performs -- short term and a long term, it performs 10 better than a Burch and it's -- that has been -- has 11 been my experience and that's what's supported by 12 data. 13 Q. Okay. So -- but are there any indications 14 to you -- when a patient comes into your office and 15 you're going to perform a surgery to correct the 16 stress urinary incontinence, what indications do you 17 say, I'm going to perform a Burch instead of a 18 synthetic midurethral sling? 19 A. My first option is a synthetic midurethral 20 sling and I counsel the patients on it. There may -- 21 I may have a patient that may say I want a Burch for 22 one or other reason. 23 Q. Okay. So it's the patient making the 24 decision that they prefer a Burch over a synthetic</p>

19 (Pages 70 to 73)



Jaime Sepulveda, M.D.

Page 74	Page 76
<p>1 midurethral sling as opposed to you recommending the</p> <p>2 Burch as the first option?</p> <p>3 A. My patients are -- I have a well-educated</p> <p>4 practice and they -- they actually may -- may bring</p> <p>5 great questions about one or the other. My experience</p> <p>6 is that they will follow my -- my recommendations.</p> <p>7 Q. Right. Do you recall any instance where</p> <p>8 you've recommended a Burch over a synthetic</p> <p>9 midurethral sling?</p> <p>10 A. There -- there was a time about when TVT</p> <p>11 came in and for one or two years that we spoke in</p> <p>12 those terms, but once randomized controlled trials</p> <p>13 came in, it was -- I tell them that that's</p> <p>14 basically -- is the best evidence that I have.</p> <p>15 Q. Your understanding was that at least at one</p> <p>16 time the Burch was the gold standard for correcting</p> <p>17 stress urinary incontinence surgically; correct?</p> <p>18 A. I -- I'm going to take exception to the</p> <p>19 "gold standard" term, but there was a time in which</p> <p>20 the Burch was the correct clinical -- clinical</p> <p>21 practice.</p> <p>22 Q. Would you use the gold standard term to</p> <p>23 describe a synthetic midurethral sling?</p> <p>24 A. I -- I just try to shy away from "gold</p>	<p>1 A. It took very little for her to leak.</p> <p>2 Q. Okay. And so why would it be that you would</p> <p>3 use a biologic sling under those circumstances?</p> <p>4 A. I use actually her own fascia and it -- it</p> <p>5 was -- we didn't have anything -- anything -- we have</p> <p>6 things that were synthetic but that were not</p> <p>7 well-studied at that time.</p> <p>8 Q. So this would have been, I assume, in either</p> <p>9 the late '90s or early 2000s?</p> <p>10 A. That's a wide range, yes.</p> <p>11 Q. Okay. You mentioned TVT Retropubic, TVT-O,</p> <p>12 TVT-S, and TVT-ABBREVO that you performed in the last</p> <p>13 ten years.</p> <p>14 Do you know approximately how many of each</p> <p>15 of those you performed?</p> <p>16 A. I -- I counted about -- at one time it was</p> <p>17 about 300 slings a year.</p> <p>18 Q. Okay. And do you know what the breakdown</p> <p>19 was of those 300 per year as to the TVT Retropubic,</p> <p>20 TVT-O, TVT-S, and TVT-ABBREVO?</p> <p>21 A. It was an evolution from TVT Retropubic to</p> <p>22 TVT-O and to TVT-Secur and then ABBREVO.</p> <p>23 Q. Okay. So over -- over time, you might --</p> <p>24 you know, you started with a TVT Retropubic, then</p>
Page 75	Page 77
<p>1 standard." I think that clinically, it's -- the</p> <p>2 current clinical standard is probably a better -- a</p> <p>3 better term.</p> <p>4 Q. So a current clinical standard is a better</p> <p>5 term to use than the term "gold standard"; right?</p> <p>6 A. I -- I agree.</p> <p>7 Q. Did you -- in the last ten years, have you</p> <p>8 ever used slings using biologic materials?</p> <p>9 A. I -- I don't know if it's within the last</p> <p>10 ten years, but I -- I have used slings using</p> <p>11 autologous, I have done slings using dermis cadaver</p> <p>12 material. I may have used them one time posing, but</p> <p>13 this is so -- so remote that -- that I cannot tell you</p> <p>14 how many or which brand did I use.</p> <p>15 Q. Do you remember any reasons why you would</p> <p>16 have used those biologic slings?</p> <p>17 A. If I had some- -- if I had someone that --</p> <p>18 that was -- the person that comes to mind is my -- the</p> <p>19 last pubovaginal sling and it was a smoker with --</p> <p>20 with bad pressures in the urethra and I used the</p> <p>21 pubovaginal sling in that patient at that time.</p> <p>22 Q. What do you mean by "bad pressures"?</p> <p>23 A. Very, very low pressures in the urethra.</p> <p>24 Q. Okay.</p>	<p>1 you -- then you preferred the TVT-O, so you would</p> <p>2 switch to that; is that right?</p> <p>3 A. Yes.</p> <p>4 Q. And then you would prefer the TVT-S and you</p> <p>5 would switch to that?</p> <p>6 A. Yes.</p> <p>7 Q. And then later you preferred the TVT-ABBREVO</p> <p>8 and switched to that; is that right?</p> <p>9 A. Right.</p> <p>10 Q. Do you still perform TVT-Os, though, or do</p> <p>11 you just kind of stick with the TVT-ABBREVO?</p> <p>12 A. I do it at the surgery center so we choose</p> <p>13 one. And since I do most of the slings, and I'm the</p> <p>14 medical director for the surgery center, I decide I'm</p> <p>15 going to use this or that one. We still have TVT-O on</p> <p>16 the shelf, but we -- we use TVT -- TVT-ABBREVO.</p> <p>17 Q. Okay. Why would you prefer a TVT-ABBREVO</p> <p>18 over a TVT-O?</p> <p>19 MR. SNELL: Form.</p> <p>20 A. I have not found a scientific -- a</p> <p>21 scientific reason for it except for the fact that --</p> <p>22 that it's the most recent product and it's -- it's a</p> <p>23 12-centimeter sling instead of a longer sling.</p> <p>24 Q. (By Mr. De La Cerda) What's the</p>

20 (Pages 74 to 77)

Jaime Sepulveda, M.D.

Page 78	Page 80
<p>1 significance of it being a shorter sling as opposed</p> <p>2 to a longer sling?</p> <p>3 A. It's -- I decided that if I can do it with</p> <p>4 12 centimeters, I'm not going to use 19 centimeters</p> <p>5 when the evidence is good in my practice.</p> <p>6 Q. Is -- you agree with the general theory that</p> <p>7 less foreign body is better when it comes to these</p> <p>8 types of procedures?</p> <p>9 MR. SNELL: Form.</p> <p>10 A. No, I think that there are physicians that</p> <p>11 have a level of comfort with TVT-O or, for that sake,</p> <p>12 with TVT Retropubic, and that being with a</p> <p>13 5-millimeter needle, a 3-millimeter needle.</p> <p>14 Each physician has his own level of comfort</p> <p>15 and they're going to use what works well for them. I</p> <p>16 have not found any scientific evidence that points out</p> <p>17 to one being better than the other based on that.</p> <p>18 Q. (By Mr. De La Cerda) What about the</p> <p>19 general -- do you agree with the general</p> <p>20 proposition, though, that more foreign body will</p> <p>21 cause more foreign body reaction within the human</p> <p>22 body?</p> <p>23 MR. SNELL: Objection, asked and answered.</p> <p>24 A. It assumes -- it assumes that there's -- the</p>	<p>1 Q. Is the Burch procedure within the standard</p> <p>2 of care?</p> <p>3 A. I think that for a physician that wants to</p> <p>4 do Burch procedures, that may apply.</p> <p>5 Q. You wouldn't criticize another doctor for</p> <p>6 doing a Burch procedure over a synthetic midurethral</p> <p>7 sling; right?</p> <p>8 A. I would not be -- be critical. I can share</p> <p>9 it, the evidence, but there's -- there's no reason for</p> <p>10 being critical over the Burch procedure.</p> <p>11 Q. Are pubovaginal slings using native tissue</p> <p>12 still taught in medical school, to your knowledge?</p> <p>13 A. No, I don't think they are taught -- I</p> <p>14 probably don't know, but I don't think they are.</p> <p>15 Q. And if a physician performed a pubovaginal</p> <p>16 sling using native tissue, would you criticize him or</p> <p>17 her for doing that?</p> <p>18 A. That's -- I have to say that's an excellent</p> <p>19 question because it's -- it probably is the procedure</p> <p>20 that would prompt me to say, "Listen, you need to</p> <p>21 reevaluate on how you're taking care of these</p> <p>22 patients," because that can be a morbid procedure.</p> <p>23 Q. So that one is a little more borderline for</p> <p>24 you?</p>
Page 79	Page 81
<p>1 term "foreign body" probably is the same -- in the</p> <p>2 same area as "gold standard." They're -- they're very</p> <p>3 wide, very unscientific. They -- in terms of the</p> <p>4 material that you leave in the area, if a physician</p> <p>5 would come and ask me, "Do you think I should do this</p> <p>6 because it leaves less material," I could not tell him</p> <p>7 with certainty, "Yes, you definitely need to move from</p> <p>8 one to the other." I have no evidence to support</p> <p>9 that.</p> <p>10 Q. (By Mr. De La Cerda) And so, ultimately,</p> <p>11 you switched to the TVT-ABBREVO just because of your</p> <p>12 personal experience with it?</p> <p>13 A. It's easier -- easier to keep on the shelf,</p> <p>14 the TVT-ABBREVO. If -- I guess, right now, if there</p> <p>15 would be -- there would be only TVT-O, I would be</p> <p>16 perfectly comfortable with it.</p> <p>17 Q. Okay. Do you know whether TVT-ABBREVO comes</p> <p>18 in laser cut or mechanically cut?</p> <p>19 A. Laser -- it comes in laser cut.</p> <p>20 Q. TVT-ABBREVO is only laser cut; right?</p> <p>21 A. Right.</p> <p>22 Q. Do you know whether the Burch procedure is</p> <p>23 still taught in medical school?</p> <p>24 A. I don't know.</p>	<p>1 A. Yes.</p> <p>2 Q. Yeah.</p> <p>3 A. And I can -- I can do that well -- I want to</p> <p>4 think that I can do it well because I did it well at</p> <p>5 one time, it's just that it's -- in terms of morbidity</p> <p>6 and seroma and wound complications and obstruction,</p> <p>7 it's -- it's a different -- different surgery.</p> <p>8 Q. Would you consider it to be within the</p> <p>9 standard of care or no?</p> <p>10 A. I -- I think that in certain areas, probably</p> <p>11 if that's -- we go to areas where they don't have what</p> <p>12 we have, that could be considered standard of care.</p> <p>13 Q. You've never done a study to determine what</p> <p>14 percentage of medical schools are teaching Burch or</p> <p>15 pubovaginal slings using native tissue; right?</p> <p>16 A. No, I don't know that.</p> <p>17 Q. In your career, how many revision or</p> <p>18 excision surgeries involving synthetic midurethral</p> <p>19 slings have you performed?</p> <p>20 A. I -- I think I have done three. I may have</p> <p>21 done more than that. Just in my mind it's -- it's</p> <p>22 infrequent enough that I actually -- one of the</p> <p>23 presentations on the thumb drive is me excising a</p> <p>24 sling, the pictures. That's how infrequent it is.</p>

21 (Pages 78 to 81)

Jaime Sepulveda, M.D.

<p style="text-align: right;">Page 82</p> <p>1 Q. So to -- I'm sorry, I didn't want to cut you 2 off. 3 A. So I actually consent to the patient and I 4 said, "This is unusual." I consent to the patient to 5 have it removed. 6 Q. Okay. So to your recollection, you've done 7 three revision or excision surgeries involving 8 synthetic midurethral slings? 9 A. I don't want to come into a fault -- faulty 10 memory, but I can recall about three. 11 Q. Okay. Of those three, how many were you 12 able to remove the entire sling? 13 MR. SNELL: Form. 14 A. On the -- it's probably two of them, the 15 entire -- the entire sling being up -- up to the 16 descending pubic ramus in that area. I remove the 17 entirety of it. 18 Q. (By Mr. De La Cerda) And so that was -- 19 that's the portion that is actually under the 20 urethra but not the portion that goes into the pubic 21 ramus; is that right? 22 A. The portion that gets about -- to about 23 1 centimeter from the obturator internus muscle. 24 Q. Okay.</p>	<p style="text-align: right;">Page 84</p> <p>1 internus muscle. 2 Q. And of these three revisionary excisions -- 3 let me first clarify. 4 Are the three revision or excision 5 surgeries, are they all three excision surgeries or 6 revision or both? How would you characterize them? 7 A. They are excisions. I was speaking about 8 removing the whole thing. 9 Q. So those three were excision surgeries. 10 Were those three patients, patients you had 11 implanted the sling or someone else? 12 A. I had one that I implanted the sling and two 13 that came from -- came referred to me. 14 Q. Okay. So to your recollection, and you've 15 implanted 300 synthetic midurethral slings for the 16 last -- per year for approximately the last ten years; 17 right? 18 A. Lately, they're -- the number of slings is 19 less. 20 Q. Okay. So would a fair estimation be that 21 somewhere between 2- and 3,000 synthetic midurethral 22 slings is what you've implanted? 23 A. Yes. 24 Q. Okay. In the last ten years; right?</p>
<p style="text-align: right;">Page 83</p> <p>1 A. So anything that is beyond the obturator 2 internus muscle, I -- I stay away from that. 3 Q. Is that because the risk outweighs the 4 benefit of removing that mesh that's beyond the 5 obturator internus muscle? 6 A. It's -- there are three factors to it. 7 Q. Okay. 8 A. The first one is that the orientation of the 9 tape is very misleading to the surgeon. It comes 10 forward to you and many surgeons, if they're 11 inexperienced, they'll keep digging into the area and 12 cause harm to the lateral side. That's one -- one of 13 the other reasons. 14 The second reason is that I haven't found 15 any -- anything convincing, and I keep looking for 16 anything that has been written about excising that -- 17 that portion of the -- of the tape. 18 And number three is that most of the time, 19 2, 3 percent of the time that we're going to revise a 20 sling for avoiding this function, it makes no -- no -- 21 there's no justification, I should say, there's no 22 justification to go beyond that area. 23 Q. Okay. 24 A. Beyond the area within the obturator</p>	<p style="text-align: right;">Page 85</p> <p>1 A. Yeah, over the last ten years, yeah, that 2 would be accurate. 3 Q. And of those 2- to 3,000 synthetic 4 midurethral slings, your testimony is that you've only 5 excised one of -- you've only, personally, excised one 6 of the slings that you've put in; is that right? 7 A. Yes. That I remember, one. I may -- may 8 have taken a segment or a fiber from another sling 9 that I might have placed. I haven't kept track of it 10 because the reality is that it's extremely rare. I'm 11 going to tell you, what happens most of the time is 12 you put the sling, the patient comes in, she's dry, 13 she's happy, she moves on. 14 Q. What were the reasons why you performed the 15 three excision surgeries that you can recall? 16 A. One of them was -- was just a tight sling on 17 the patient. A young patient with a tight sling and 18 she was having difficulty urinating. 19 I recall one -- another one was someone with 20 a sling that was not a mid-urethra, it was higher. 21 The sling was placed higher than the urethra and it 22 wasn't working and I took that one and put one in the 23 urethra. 24 Q. Any other reason that you can recall?</p>

22 (Pages 82 to 85)

Jaime Sepulveda, M.D.

Page 86	Page 88
<p>1 A. No. I had -- I had one that came in because</p> <p>2 she had -- she had pain on the area of the insertion</p> <p>3 of the sling.</p> <p>4 Q. Okay. So you had one with pain -- have you</p> <p>5 ever removed a synthetic midurethral sling because of</p> <p>6 an erosion?</p> <p>7 A. Yes, I have. I have removed that erosion</p> <p>8 and I actually had one that I didn't put in -- put in</p> <p>9 those three. Now I recall one that she broke the</p> <p>10 incision and when I saw the patient coming on the</p> <p>11 third week, on the third week, I asked her, "How is it</p> <p>12 working?" She said, "Well, it's working."</p> <p>13 And I examine her and she -- she had an</p> <p>14 exposure on the -- on the sling. She was honest --</p> <p>15 honest enough to tell me, "Doctor, I was at home</p> <p>16 eating, I was choking on food and I threw myself over</p> <p>17 a chair and I felt -- I felt something." So she broke</p> <p>18 the incision line, and I saw it and I said, "Okay,</p> <p>19 well, I'll -- I recommend that you have this removed."</p> <p>20 Q. So is that the -- is your testimony that's</p> <p>21 the only exposure -- or that circumstance you just</p> <p>22 mentioned, is that the only exposure where erosion of</p> <p>23 a synthetic midurethral slings that you had to treat?</p> <p>24 A. No, I had a couple of exposures in the -- in</p>	<p>1 Q. Have you ever performed an excision surgery</p> <p>2 or revision surgery because the patient was suffering</p> <p>3 from dyspareunia?</p> <p>4 MR. SNELL: Form.</p> <p>5 A. I -- I did one, same one that was having --</p> <p>6 Q. (By Mr. De La Cerda) Pain?</p> <p>7 A. -- the pain, yeah.</p> <p>8 Q. Got it. Okay.</p> <p>9 All right. The TVTs and the TVT-Os that</p> <p>10 you've placed, those have involved -- or have been</p> <p>11 mesh that is mechanically cut mesh and mesh that is</p> <p>12 laser cut mesh; right?</p> <p>13 A. Both.</p> <p>14 Q. Did that have anything to do with the time</p> <p>15 period in which you were implanting it or do you</p> <p>16 just -- did you stock both or what did that have to</p> <p>17 do -- any factors that that had to do with?</p> <p>18 A. No, I did not have any specific reason to</p> <p>19 choose one over the other.</p> <p>20 Q. Okay. Over the last ten years you performed</p> <p>21 surgeries to correct pelvic organ prolapse; right?</p> <p>22 A. Yes.</p> <p>23 Q. What types of surgeries have you performed?</p> <p>24 A. I have performed anterior repairs, posterior</p>
Page 87	Page 89
<p>1 the past, but it's something that either you give</p> <p>2 estrogen or you just take the fibers with a tenotomy</p> <p>3 scissors, which are using in reconstructive surgery,</p> <p>4 actually they're used in the eye and they have --</p> <p>5 they're just perfect for this.</p> <p>6 Q. I guess my crude understanding of that is</p> <p>7 it's like an in-office trimming of the exposed mesh;</p> <p>8 is that right?</p> <p>9 A. It's -- you may have a few segments. In</p> <p>10 other words, you have not seen the whole incision open</p> <p>11 up.</p> <p>12 Q. Okay.</p> <p>13 A. And I -- I do remember a long time ago I saw</p> <p>14 a patient with a segment on one side. That's the only</p> <p>15 one I remember that the exposure was not in the</p> <p>16 midline on the incision. And that patient, I tried to</p> <p>17 convince her to let me take it and she said, "No,</p> <p>18 you're not going to take anything because it's not</p> <p>19 bothering me."</p> <p>20 Q. So these are -- these are done -- this</p> <p>21 procedure you just mentioned, this trimming of the</p> <p>22 sling is done in-office, not under general anesthesia</p> <p>23 in surgery; right?</p> <p>24 A. Right.</p>	<p>1 repairs, enterocele repairs, iliococcygeal suspension,</p> <p>2 sacral spinous ligamentous suspension, abdominal</p> <p>3 sacrocolpopexies, robotic sacrocolpopexies, Prolift,</p> <p>4 graft reinforced repair with biologicals, augmented</p> <p>5 repairs with Gynemesh, perineoplasty.</p> <p>6 I think I have mentioned probably all of</p> <p>7 them.</p> <p>8 Q. The anterior and posterior repairs, did</p> <p>9 those include colporrhaphies?</p> <p>10 A. Yes.</p> <p>11 Q. Are those synonymous or --</p> <p>12 A. Pretty much, yes.</p> <p>13 Q. Okay. Now, all the repairs that you just</p> <p>14 mentioned, those are all within the standard of care;</p> <p>15 right?</p> <p>16 A. Yes.</p> <p>17 Q. Is implanting transvaginal mesh -- strike</p> <p>18 that.</p> <p>19 Is implanting synthetic polypropylene mesh</p> <p>20 transvaginally still within the standard of care?</p> <p>21 MR. SNELL: Form.</p> <p>22 A. It's still within the standard of care if it</p> <p>23 will have the product available.</p> <p>24 Q. (By Mr. De La Cerda) As of now, from the</p>

23 (Pages 86 to 89)

Jaime Sepulveda, M.D.

Page 90	Page 92
<p>1 Ethicon products, Gynemesh is still available;  2 right?  3 A. Gynemesh is still available.  4 Q. And do you -- is it your opinion that it's  5 still within the standard of care to implant Gynemesh  6 transvaginally for the treatment of pelvic organ  7 prolapse?  8 A. I believe it changed, the actual indication  9 or clearance. I may have read that.  10 Q. So the indication now is to use it for  11 abdominal sacrocolpopexies; right?  12 A. Yes.  13 Q. So is it within the standard of care,  14 though, to implant Gynemesh -- I'm talking about  15 today -- so is it as of today within the standard of  16 care to implant Gynemesh transvaginally for the  17 treatment of pelvic organ prolapse?  18 A. Not -- not today.  19 Q. Okay.  20 A. Based on what I just stated.  21 Q. Okay. What was -- what was for you an  22 indication in the past to implant synthetic mesh  23 transvaginally for the treatment of pelvic organ  24 prolapse as opposed to doing one of the other non-mesh</p>	<p>1 transvaginal mesh for pelvic organ prolapse?  2 A. Yes, I have.  3 Q. And how many have you done of that?  4 A. I look at those and they may be in the -- in  5 the 10, 20, may be right -- right there based on what  6 I saw the last time.  7 Q. So approximately 10 to 20 in your career  8 revision or excision surgeries involving synthetic  9 polypropylene transvaginal mesh?  10 A. That's -- that's a ballpark figure, yes.  11 That's a very general figure.  12 Q. And of those 10 to 20, how many were you  13 able to remove the entire mesh device?  14 MR. SNELL: Form, foundation.  15 A. In most of them -- most of them you can  16 dissect the space -- the same space where you place it  17 and you can -- you can remove it. It's -- if you have  18 it in the muscle, obviously that's -- I already stated  19 that there is no benefit of doing that. But if you  20 dissect that area, you bring it up and you  21 hydrodissect your segments, you're -- you can remove  22 most of it.  23 Q. (By Mr. De La Cerda) Have you ever  24 performed a revision or excision surgery because the</p>
Page 91	Page 93
<p>1 procedures that you've mentioned?  2 A. I -- I came to the clinical appreciation  3 that patients that have had a hysterectomy, patients  4 that have had recurrent prolapse, patients that had a  5 high degree of exertion, and patients that have a  6 recurrent compartment or a contralateral compartment  7 defect, those patients benefit from it.  8 I -- that's the general. I knew that I had  9 patients that have -- I had one shot to take to the  10 operating room and I -- for whatever reason, and those  11 are the most difficult ones because they were more  12 complicated, but on the other side, you wanted to give  13 her the durability of the repair.  14 That's -- that's in general what I -- what I  15 use when I counsel someone on the -- on the use of  16 this synthetic graft. We started -- we started  17 reading then, around the time that we had Gynemesh,  18 more and more about durability and the repairs,  19 specifically for those apical -- apical defects, so it  20 became very attractive to treat patients on the  21 apical, with apical defects, and when we didn't have  22 to do an incision.  23 Q. Have you ever performed revision or excision  24 surgeries involving synthetic polypropylene</p>	<p>1 patient was reporting pain and this is, again, I'm  2 talking about patients with transvaginal mesh for  3 pelvic organ prolapse?  4 A. You know, pain -- pain is rare after this  5 kind of repair. What most frequently happen is that  6 you would get in to have -- to remove an exposure, and  7 then you end up -- you ended up removing more than  8 what you thought you were going to remove because you  9 had the plane and you were just dissecting the area  10 and remove it. Then you ended up reinforcing the area  11 with sutures.  12 There are times in which I -- I -- I say I  13 have to do something to support it and it becomes such  14 a subjective thing that I wish I could have explained  15 this not now, but even when doctors would ask me the  16 same questions and -- and be accurate and precise  17 about it, but no, it's a general -- it's a general  18 idea. What I'm explaining now is a general idea of  19 what happens in the operating room when you're going  20 to remove it. So you start small, but you start  21 extending yourself on the dissection.  22 Q. So of the 10 to 20, though, how many of  23 those did you remove for the reason of that they  24 had -- they were experiencing pain?</p>

24 (Pages 90 to 93)



Jaime Sepulveda, M.D.

Page 94	Page 96
<p>1 A. It's -- I think it's rare. I can't give you 2 a specific number without -- okay, I want to be 3 accurate and precise, but it was rare. The most 4 recurring reason was an exposure. 5 Q. Okay. And did they report exposure with 6 pain or no? 7 A. No. No. They -- most frequent complaint 8 with the exposure was vaginal discharge. 9 Q. So were the 10 to 20 excision surgeries, 10 were those primarily because of exposures? 11 A. It's -- it's -- mostly exposure and 12 symptomatic exposures, exposures in which you saw 13 granulation tissue. 14 Q. Of granulation tissue, okay. 15 Were any of the excision procedures 16 performed specifically because of dyspareunia? 17 A. No, I don't remember anyone specific on 18 dyspareunia. I remember taking one Prolift that was 19 dyspareunia and pain. 20 Q. Have you ever -- have you ever had a patient 21 come to you reporting dyspareunia or pain after having 22 had a transvaginal mesh or pelvic organ prolapse where 23 you believed it was the transvaginal mesh causing the 24 pain or dyspareunia?</p>	<p>1 your career? 2 A. Definitely more than 100. 3 Q. Between 100 and 200? 4 A. Easily. 5 Q. How many Prosimas have you implanted in your 6 career? 7 A. I did about 50. 8 Q. Okay. Turning -- we've now been going 9 another hour. Would you like to take a break? 10 A. Yes, just quick as before. 11 (Thereupon, a recess was taken from 12 10:21 a.m. until 10:29 a.m., after which the 13 following proceedings were held:) 14 Q. (By Mr. De La Cerda) Okay. We are back 15 on the record. 16 Doctor, I wanted to direct your attention 17 back to your CV, please, which is Exhibit 13. Just a 18 couple quick things. If you'll turn to the fourth 19 page, the section which is "Courses Presented." 20 A. Yes. 21 Q. The entities that I've seen -- well, the 22 entities that are mentioned within this section where 23 you've presented a course, the only entities I've seen 24 mentioned are Johnson &amp; Johnson, Ethicon Endo and</p>
Page 95	Page 97
<p>1 A. No. Most of the patients that we see with 2 dyspareunia, in a busy vaginal surgery practice, is 3 without mesh. 4 Q. So you've never had that happen where you 5 believed the dyspareunia was being caused by the 6 transvaginal mesh; right? 7 A. By -- specifically by transvaginal mesh, no. 8 Q. Same question for the -- I don't know if I 9 asked you for the slings, but have you ever had a 10 patient come to you reporting pelvic pain or 11 dyspareunia after having had a synthetic midurethral 12 sling where you believed that it was the sling causing 13 that pain or dyspareunia? 14 A. No, I -- I saw one sling that was low enough 15 that I -- it could -- that could have been the source 16 of dyspareunia. 17 Q. Okay. And I guess really you're thinking 18 it's more the positioning of the sling as opposed to 19 the actual sling; right? 20 A. Yes. 21 Q. Okay. How many Gynemesh PS's have you 22 implanted in your practice, in your career? 23 A. Over a hundred. 24 Q. And how many Prolifts have you implanted in</p>	<p>1 Ethicon. 2 Are there any other entities mentioned here 3 or no? 4 A. No, I never worked outside of Ethicon for 5 any another company. 6 Q. Then under "Research Experience," which is, 7 I guess, a couple pages later, is there -- do you have 8 listed here any research on transvaginal polypropylene 9 midurethral slings or transvaginal polypropylene 10 pelvic organ prolapse mesh? 11 A. No, I did not do research on transvaginal 12 sling. I rely on the randomized control trials. 13 Q. And then under "Presentations and 14 Publications as Author or Coauthor," I didn't see any 15 presentations or publications that involve 16 transvaginal polypropylene midurethral slings or 17 transvaginal polypropylene mesh for pelvic organ 18 prolapse; is that right? 19 A. Yes, I did not -- I did not publish on 20 transvaginal slings. 21 Q. We can set that aside for a second. 22 Okay. You're not a biomedical engineer; 23 correct? 24 A. I -- I have a very good understanding of</p>

25 (Pages 94 to 97)



Jaime Sepulveda, M.D.

Page 98	Page 100
<p>1 biomedical engineering.</p> <p>2 Q. Okay. Would you consider yourself a</p> <p>3 biomedical engineer?</p> <p>4 A. I do not get compensated for doing</p> <p>5 biomedical engineering.</p> <p>6 Q. Okay.</p> <p>7 A. And I did not graduate from -- with a degree</p> <p>8 of biomedical engineering. I do -- I do understand</p> <p>9 biomedical engineering well.</p> <p>10 Q. I saw that you brought some books here that</p> <p>11 would relate to that, I believe. What is it that</p> <p>12 would provide the basis for your belief that you have</p> <p>13 expertise in biomedical engineering?</p> <p>14 A. I have devoted years to understand it, to</p> <p>15 read about it beyond what any other physician that I</p> <p>16 ever met have done.</p> <p>17 Q. Anything else?</p> <p>18 A. I have studied, I have spoken to biomedical</p> <p>19 engineers, but specifically it's a passion and a</p> <p>20 dedication that I have had to understand it.</p> <p>21 Q. Would you consider yourself an expert on the</p> <p>22 design of medical devices?</p> <p>23 A. It goes right along with the biomedical</p> <p>24 engineering, with the surgical expertise that allows</p>	<p>1 Q. Were you ever designed -- were you ever</p> <p>2 involved in the design of any transvaginal mesh</p> <p>3 devices?</p> <p>4 A. Not in the devices of the ones that I use.</p> <p>5 Q. Do you have any patents on medical devices?</p> <p>6 A. No.</p> <p>7 Q. Do you know what the standard is for a --</p> <p>8 that a manufacturer must follow in designing mesh</p> <p>9 products?</p> <p>10 A. I'm -- I became very familiarized with --</p> <p>11 when I was with Ethicon by my own inquiries.</p> <p>12 Q. What standards did Ethicon employ in the</p> <p>13 design of its mesh products?</p> <p>14 A. It's -- it was from the initiation, from</p> <p>15 what they had an idea of what the device was, what the</p> <p>16 need was, and then there were -- I know there was a</p> <p>17 structure for research and development with the</p> <p>18 running of different -- different trials at different</p> <p>19 levels. And I get that information and submit it,</p> <p>20 along with other information that I was -- in which --</p> <p>21 that had nothing to do with surgery, but cytotoxicity,</p> <p>22 paragenicity assays, cell cultures assays, and all</p> <p>23 this information submitted to the FDA, who would then</p> <p>24 review it and -- and within its own division for the</p>
Page 99	Page 101
<p>1 me to see what -- what can save in terms of efficiency</p> <p>2 in the operating room, what can I do better for my</p> <p>3 patients. That's what I use this for. This allows me</p> <p>4 to understand the design better.</p> <p>5 Q. Have you ever, personally, designed a</p> <p>6 medical device?</p> <p>7 A. I -- not -- not a medical device, but I have</p> <p>8 my own set of needles that I actually had made.</p> <p>9 Q. What were those needles for?</p> <p>10 A. For -- to approach the deep space in the</p> <p>11 pelvis.</p> <p>12 Q. Were those used in connection with</p> <p>13 implanting mesh at all?</p> <p>14 A. No, I use them for sutures.</p> <p>15 Q. Okay. Have you ever been involved in the</p> <p>16 design of a medical device?</p> <p>17 A. I -- I did give input to the design. It was</p> <p>18 not -- it was not my own patent.</p> <p>19 Q. And what device was that?</p> <p>20 A. Staplers for -- for -- staplers, a</p> <p>21 retractor, again, a circumferential needle.</p> <p>22 Q. And these are all devices that are used in</p> <p>23 connection with surgery?</p> <p>24 A. Yes.</p>	<p>1 device and then get back to them.</p> <p>2 Q. Do you know what a manufacturer researches</p> <p>3 before a product is designed or released?</p> <p>4 MR. SNELL: Form, overbroad.</p> <p>5 A. The --</p> <p>6 Q. (By Mr. De La Cerda) Let's take it a</p> <p>7 little more specific to the mesh products.</p> <p>8 What did -- what, to your knowledge, did</p> <p>9 Ethicon research in regard to its mesh products before</p> <p>10 they were released?</p> <p>11 A. I know that they -- they went through their</p> <p>12 suture -- suture research and -- and I know that they</p> <p>13 did experiments short term and long term with sutures.</p> <p>14 I know that there was an opinion acquired</p> <p>15 from the field on the use of different sutures. Then</p> <p>16 there was a -- there was a use on the type of mesh</p> <p>17 that was used for prolapse on the different types of</p> <p>18 meshes. That wasn't done in the United States, that</p> <p>19 was done in France.</p> <p>20 And there was also -- the materials were</p> <p>21 even evaluated in the same -- in the same way that</p> <p>22 sutures are evaluated, but also in the operating room.</p> <p>23 I'm aware of that one, too.</p> <p>24 I'm aware that the needles and the approach</p>

26 (Pages 98 to 101)

Jaime Sepulveda, M.D.

Page 102	Page 104
<p>1 that was used was evaluated by them before it was even  2 used in the United States. And I know the packaging,  3 the packaging was evaluated. I was able to see how  4 they design the package for the operating room.  5 So all those lines never got to the place  6 where they actually do the knitting of the material,  7 never -- never got to see that, but I know there was a  8 facility for that.  9 So there was a step of -- actually quite an  10 elaborate chain that ended up giving the product.  11 Q. Do you know what types of experts were  12 involved in the design of Ethicon's mesh products?  13 A. I spoke to materials engineers. I actually  14 enjoy very much when I interacted with one of the  15 biomechanical engineers over there that had a doctor's  16 degree on biomaterials and I actually -- and I enjoyed  17 that. I look at different -- they asked me for  18 different types of materials. We look at -- they got  19 my input on fibers.  20 I know that there was another group in  21 France that was using those materials. One thing that  22 I observed is that it would not just go with just one  23 opinion, it was a consensus of different surgeons and  24 different -- different settings.</p>	<p>1 devices. I had an idea of the classification of the  2 devices and I had an idea, because I use other types  3 of -- of devices that have nothing to do with mesh.  4 Q. What's your understanding of the  5 classifications of devices?  6 A. I knew that heart -- heart monitors and  7 nerve stimulators and intermittent nerve stimulator  8 had a different classification than our meshes had and  9 that surgical instruments would have and that sutures  10 would have. You can -- you can just open -- you go to  11 the operating room and get into one of the boxes of  12 the sutures and you can pull that paper that gives all  13 these different things about the sutures. So it's --  14 I knew I had -- I had an idea of the different -- at  15 least three classifications that were used.  16 Q. Some requiring testing before they go out on  17 the market, some perhaps not; right?  18 MR. SNELL: Form.  19 A. Some methods -- some methods did require  20 different type -- different types of testing,  21 different -- each one had different requirements.  22 Q. (By Mr. De La Cerda) Do you know how  23 pelvic organ prolapse, transvaginal synthetic  24 polypropylene mesh is currently classified?</p>
Page 103	Page 105
<p>1 Q. Do you remember the names of any of the  2 folks that you interacted with on those issues?  3 A. I can't -- I can't remember because it's  4 over -- over five years and, you know, it's -- it  5 wasn't a friendship that would continue beyond that.  6 It was a work relationship.  7 Q. Do you know what a "design history file" is?  8 A. No.  9 Q. Are you familiar with industry standards  10 that govern medical device design?  11 A. I read at one time, I read that. I read  12 about ISO testing. I read about ISO testing. I read  13 about the different toxicity assays and, actually, at  14 one time I even may have read about the testing that  15 was done for -- for meshes that was using sutures,  16 i.e., I actually research it and read about it.  17 Q. Anything else that you can recall?  18 A. No.  19 Q. I'm sorry, is that --  20 A. I'm sorry. Not at this moment.  21 Q. Are you familiar with regulatory standards  22 that govern medical devices?  23 A. I became -- I became aware of the regulatory  24 standards. I knew about the classifications of</p>	<p>1 A. It's -- I read, recently, the classification  2 for prolapse meshes and for -- they went up to  3 Class 3.  4 Q. And what does that mean to your  5 understanding?  6 A. They are classified as high-risk devices.  7 Q. Do you agree with that?  8 A. I -- I'll -- I agree with the approval that  9 the FDA has and I'm not going to challenge the FDA or  10 their panel on that one.  11 Q. Fair enough. Would you -- are you an expert  12 in polymer chemistry?  13 A. I -- I don't design polymer chemicals. I do  14 understand certain -- the polymers that are used in my  15 specialty.  16 Q. And what polymers would those be?  17 A. When it comes down to polymers used in my  18 specialty, it's polypropylene.  19 Q. Are you an expert in surgical pathology?  20 A. That -- that's an average over the last 25  21 years, I do look at slides.  22 Q. And that would -- that would be the basis  23 for you stating that you had expertise in surgical  24 pathology; is that right?</p>

27 (Pages 102 to 105)

Jaime Sepulveda, M.D.

Page 106	Page 108
<p>1 A. I think that everyone that is a surgeon 2 needs to have an expertise in surgical pathology. 3 Q. Okay. So that would be your basis for 4 saying that; right? 5 A. That's correct. 6 Q. I didn't ask you this. What would be your 7 basis for saying you have expertise in polymer 8 chemistry, is it your experience? 9 A. My experience and what I read, the time that 10 I devote, the time that I have devoted over the years 11 to look at sutures and specifically polypropylene. 12 Q. Have you ever personally done chemical tests 13 to determine if polypropylene mesh degrades? 14 A. I have not personally done -- done that 15 testing. I did -- I did -- I have -- I read about it 16 and have considered that hypothesis. 17 Q. Have you ever done a microscopic analysis of 18 explanted polypropylene mesh to determine if the mesh 19 degraded personally? 20 A. Not -- not with the purpose of degradation 21 because I still -- I still looking for what -- what 22 does degradation really mean in the pathology 23 specimen. 24 Q. Okay. I'm going to shift gears a little</p>	<p>1 essentially what -- what could happen that is within 2 my control that is -- and what's not in my control and 3 patients appreciate that we do that. 4 Q. (By Mr. De La Cerda) A physician should 5 warn his patient -- his or her patient of 6 characteristics of the transvaginal mesh or sling 7 product that can significantly increase their risk 8 of severe complications; correct? 9 MR. SNELL: Form, foundation. 10 A. On that counseling, the counseling should 11 involve what has been tested. In other words, the 12 last thing that you want as a patient is to be 13 overwhelmed by just a wealth of data that is not 14 clinically relevant, and we -- we have studies that 15 actually address that. 16 Q. (By Mr. De La Cerda) So I think we might 17 be getting to something there. If -- if a 18 characteristic of a transvaginal mesh or sling 19 product is clinically relevant, should that be 20 disclosed to a patient during the informed consent 21 process? 22 MR. SNELL: Same objection, foundation. 23 A. The informed consent addresses that. 24 Q. (By Mr. De La Cerda) So is that a "yes"?</p>
Page 107	Page 109
<p>1 bit. 2 Would it be fair to say that before a 3 physician decides to utilize a transvaginal 4 polypropylene mesh or sling to treat a patient, that 5 it's necessary for the physician to warn the patient 6 of all known side effects of the product, including 7 severe ones? 8 MR. SNELL: Objection, form, speculation. 9 A. I think that before any -- any surgery, 10 there has to be -- there has to be a full 11 understanding of the -- as part of the informed 12 consent. And when -- when that's happening, there -- 13 there are factors that are going to play into it. 14 Yes, ideally, we should be able to clear our 15 patients and get -- get a full understanding of it. 16 There are times in which the patient cannot understand 17 it and we have to find, as physicians and surgeons, a 18 way to get them through the most relevance. But that 19 including -- includes surgery with or without mesh. 20 Q. (By Mr. De La Cerda) Okay. So do you 21 think that all the known side effects, including 22 severe ones, should be disclosed to patients? 23 MR. SNELL: Same objection, form. 24 A. It's all known -- not only side effects, but</p>	<p>1 A. That would be in general a yes within -- 2 within the parameters of that conversation between the 3 physician and the -- and the patient. So it would be 4 a yes with a condition that with knowing that that's 5 very unique. That's a very unique interaction. 6 Q. Okay. Do you agree that a physician has a 7 duty to inform his or her patients of the material 8 risks associated with a transvaginal mesh or sling 9 product before it's implanted in the patient? 10 MR. SNELL: Form, foundation, overbroad. 11 A. I -- I -- my opinion is that the patient 12 should be informed not only of -- of the mesh, but 13 if -- if surgery is being done with sutures, the 14 patient should know that, too. 15 Q. (By Mr. De La Cerda) I mean, what I'm 16 trying to do is use different terms for the risks or 17 complications and in this one I'm using material 18 risks associated with transvaginal mesh or sling 19 product. Do you think that material risks should be 20 disclosed to the patient? 21 MR. SNELL: Same objection, vague, 22 immaterial. 23 A. Just to clarify, are you talking about the 24 material or the material risk?</p>

28 (Pages 106 to 109)

Jaime Sepulveda, M.D.

Page 110	Page 112
<p>1 Q. (By Mr. De La Cerda) That's a good</p> <p>2 question.</p> <p>3 Material, that term I'm using -- because</p> <p>4 there's different ways that we've seen risks and</p> <p>5 complications associated with mesh products described</p> <p>6 by physicians. Sometimes they describe those risks as</p> <p>7 material risks, not as the material polypropylene, but</p> <p>8 as being relevant risks.</p> <p>9 A. Oh.</p> <p>10 Q. They're using that word.</p> <p>11 A. I understand.</p> <p>12 Q. That's a good question. Some doctors have</p> <p>13 used the term "material risk, "Yeah, I disclose it if</p> <p>14 it was a material risk."</p> <p>15 Now with that explanation, do you believe</p> <p>16 that material risks associated with these products</p> <p>17 should be disclosed during the informed consent</p> <p>18 process?</p> <p>19 MR. SNELL: Same objection.</p> <p>20 A. The material risk associated with the whole</p> <p>21 extent of the procedure should be -- should be</p> <p>22 disclosed.</p> <p>23 Q. (By Mr. De La Cerda) Okay. You mentioned</p> <p>24 the term "clinically relevant." Is that the same</p>	<p>1 patient to make a determination of whether she wants</p> <p>2 to undergo the surgery; right?</p> <p>3 A. It's -- patients are going -- are going to</p> <p>4 eventually follow your -- the -- the doctor, the</p> <p>5 doctor's advice. But the reason why you do the</p> <p>6 informed consent is, more than the patient deciding,</p> <p>7 which many times they -- they cannot decide, it's to</p> <p>8 empower that patient with the information of this is</p> <p>9 what I use for my decision, the decision that I</p> <p>10 recommended to you.</p> <p>11 Q. Okay. Ultimately, though, it is -- the</p> <p>12 patient has the right to decide one way or another</p> <p>13 what they want to do; right?</p> <p>14 MR. SNELL: Form, overbroad.</p> <p>15 A. Patient -- patients may -- may ask more</p> <p>16 questions or may -- say "I will have a preference,"</p> <p>17 but in 25 years seeing patients, patients will tell --</p> <p>18 will ask you, "Doctor, tell me what you -- you think</p> <p>19 is the best way of doing it and tell me why and how</p> <p>20 you come to that decision."</p> <p>21 Q. (By Mr. De La Cerda) Okay. So have you</p> <p>22 ever had a patient say, after being consented or</p> <p>23 receiving informed consent, saying, "No, I don't</p> <p>24 want to have that procedure," as to mesh?</p>
Page 111	Page 113
<p>1 thing as clinically significant?</p> <p>2 A. Um, clinically relevant is statistically</p> <p>3 significant.</p> <p>4 Q. Could you explain what that means, what your</p> <p>5 understanding is of that?</p> <p>6 A. It's -- with the best level of evidence that</p> <p>7 we have for what we're doing, explain to the patient</p> <p>8 this is -- we're going to translate it from the</p> <p>9 statistically significant to what's common and what's</p> <p>10 relevant in the surgery.</p> <p>11 Q. Okay. I'm going to try and ask this</p> <p>12 properly.</p> <p>13 Do you agree that a physician should warn</p> <p>14 his or her patients of risks or complications</p> <p>15 associated with the transvaginal mesh or sling</p> <p>16 products that are clinically relevant or statistically</p> <p>17 significant?</p> <p>18 MR. SNELL: Form.</p> <p>19 A. For the whole extent of the procedure.</p> <p>20 Q. (By Mr. De La Cerda) Including the</p> <p>21 products, though; right?</p> <p>22 A. Including the products.</p> <p>23 Q. Okay. Now, the purpose of warning a patient</p> <p>24 during the informed consent process is to allow that</p>	<p>1 A. No, I -- I have not had that experience.</p> <p>2 Q. Do you agree it's important for the</p> <p>3 physician to have as much information about the risks</p> <p>4 associated with transvaginal mesh or sling product so</p> <p>5 that the physician can make an informed decision on</p> <p>6 whether to recommend those products?</p> <p>7 A. I think it's important that the physician</p> <p>8 gets accurate and makes a reasonable effort to get</p> <p>9 better on what they use and what they do every single</p> <p>10 day.</p> <p>11 Q. Including the information that they are</p> <p>12 going to communicate to the patient; right?</p> <p>13 A. It's especially if you're going to</p> <p>14 communicate to the patient and -- especially when it</p> <p>15 has to do with you making a clinical decision.</p> <p>16 Q. Do you agree that physicians rely on a</p> <p>17 transvaginal mesh manufacturer to provide them with</p> <p>18 information about the risks and complications</p> <p>19 associated with their transvaginal mesh products?</p> <p>20 MR. SNELL: Objection, overbroad and</p> <p>21 requires speculation.</p> <p>22 A. I can't -- I cannot think for all the</p> <p>23 physicians, but I -- I can tell you that their</p> <p>24 responsibility is within ourselves before we use any</p>

Jaime Sepulveda, M.D.

<p style="text-align: right;">Page 114</p> <p>1 product.</p> <p>2 Q. (By Mr. De La Cerda) Do you agree the</p> <p>3 transvaginal mesh manufacturers are at least one</p> <p>4 source of information that a physician can rely on</p> <p>5 in obtaining information about their risks and</p> <p>6 complications of transvaginal mesh products?</p> <p>7 MR. SNELL: Objection, speculation.</p> <p>8 A. It might be at the low end of the -- of the</p> <p>9 evidence that we gather.</p> <p>10 Q. (By Mr. De La Cerda) You're not saying</p> <p>11 that a physician shouldn't rely on information from</p> <p>12 a transvaginal mesh manufacturer about the risks and</p> <p>13 complications of those products; right?</p> <p>14 MR. SNELL: Form, overbroad.</p> <p>15 A. I think that a physician needs to rely on</p> <p>16 the best evidence, best clinical evidence, not just in</p> <p>17 any sort of marketing communication or sales</p> <p>18 communication. They need to know that the decision to</p> <p>19 do surgery is a scientific process and they need to</p> <p>20 read that.</p> <p>21 Q. (By Mr. De La Cerda) If -- but certainly</p> <p>22 if a transvaginal mesh manufacturer is providing a</p> <p>23 serious warning about its products, even if that</p> <p>24 warning hasn't played out in the scientific</p>	<p style="text-align: right;">Page 116</p> <p>1 hypothetical.</p> <p>2 Q. (By Mr. De La Cerda) The answer is of</p> <p>3 course; right?</p> <p>4 MR. SNELL: I don't know about that. I</p> <p>5 mean, that's the doctor's answer, but my</p> <p>6 objection is incomplete hypothetical, purely</p> <p>7 speculative.</p> <p>8 Go ahead.</p> <p>9 A. The explosion thing is a little out there.</p> <p>10 It's -- we have not seen any devices that actually</p> <p>11 explode for prolapse or incontinence. I don't know</p> <p>12 for the other ones.</p> <p>13 The point I'm trying to come across is, to</p> <p>14 answer your question, when we look at information, we</p> <p>15 look at randomized control trials. Now, randomized</p> <p>16 control trials in cohort studies, even case control</p> <p>17 studies, you can go down to a list and you're going --</p> <p>18 the methodology is what allows you to give</p> <p>19 recommendations and form your counseling.</p> <p>20 Q. (By Mr. De La Cerda) So even if the</p> <p>21 manufacturer knows of severe life-altering</p> <p>22 complications associated with its products, if that</p> <p>23 severe life-altering complication hasn't played out</p> <p>24 in the randomized control trials, you believe that</p>
<p style="text-align: right;">Page 115</p> <p>1 literature, I mean, that's still something that</p> <p>2 needs to be considered; right?</p> <p>3 MR. SNELL: Form, overbroad.</p> <p>4 A. There's a degree of information that you</p> <p>5 need to consider. You -- you have -- you're a doctor</p> <p>6 and you have the scientific information because that</p> <p>7 allows you to analyze information better. So in that</p> <p>8 regard, what we're going to see is information that is</p> <p>9 relevant because they're at the highest level of</p> <p>10 evidence, information that is less relevant because</p> <p>11 they are the lowest one, but there's a -- there's a</p> <p>12 hierarchy -- did I say that word okay? -- there is a</p> <p>13 hierarchy of information and we're going to go for the</p> <p>14 highest one.</p> <p>15 Q. (By Mr. De La Cerda) Okay. Let's take a</p> <p>16 silly example for a second. If the manufacturer of</p> <p>17 transvaginal mesh knows that there's a</p> <p>18 one-in-a-million chance that it explodes inside a</p> <p>19 human body, but that is never played out in the</p> <p>20 RCTs, never, ever been seen by anyone other than the</p> <p>21 manufacturer, does that information need to be put</p> <p>22 out to the public and told to physicians?</p> <p>23 MR. SNELL: Objection. I'm going to have to</p> <p>24 object, incomplete, purely speculative,</p>	<p style="text-align: right;">Page 117</p> <p>1 physicians shouldn't place much weight on that?</p> <p>2 A. I think as humans -- as humans, if we see</p> <p>3 that there is any -- any danger for anyone, for any</p> <p>4 other human being, we'll just go and say it,</p> <p>5 regardless of who we work for. And at the end it's</p> <p>6 not a company, it's a group of people working. So the</p> <p>7 human -- the human nature is to -- the human thing is</p> <p>8 to actually do that, and that's our nature. But</p> <p>9 that's different from having -- making a clinical</p> <p>10 decision.</p> <p>11 Q. Okay. So, ultimately, should information</p> <p>12 like that, if it's known to manufacturer, but it</p> <p>13 hasn't played out in the randomized control trials,</p> <p>14 should information like that about severe</p> <p>15 life-altering complications be communicated to a</p> <p>16 patient during the informed consent process?</p> <p>17 MR. SNELL: Form, asked and answered.</p> <p>18 A. What we're going to use to counsel patients</p> <p>19 is randomized control trials. And if -- if the</p> <p>20 question is if the manufacturer should disclose it,</p> <p>21 I -- I -- my opinion is probably most people would go</p> <p>22 ahead and disclose it, but in terms of making a</p> <p>23 clinical decision, we're going to use for the best</p> <p>24 evidence that we have.</p>

30 (Pages 114 to 117)



Jaime Sepulveda, M.D.

Page 118	Page 120
<p>1 Q. (By Mr. De La Cerda) And I understand, I</p> <p>2 definitely understand. I guess what I'm trying to</p> <p>3 get at, though, is: Should that information be</p> <p>4 communicated to the patient during the informed</p> <p>5 consent process or not?</p> <p>6 A. Only the information that is backed by good</p> <p>7 science.</p> <p>8 Q. Okay. So the answer is; no, right?</p> <p>9 MR. SNELL: Objection, asked and answered.</p> <p>10 A. If it's not -- if it's not backed by</p> <p>11 science, it plays no role in the counseling of a</p> <p>12 patient.</p> <p>13 Q. (By Mr. De La Cerda) Including if the</p> <p>14 manufacturer has discovered severe life-altering</p> <p>15 complications that it knows of, even though it</p> <p>16 hasn't been played out in the randomized control</p> <p>17 trials and the medical literature; right?</p> <p>18 A. Our counseling --</p> <p>19 MR. SNELL: Same objection.</p> <p>20 A. Our clinical counseling is evidence-based.</p> <p>21 Q. (By Mr. De La Cerda) Okay. And evidence</p> <p>22 from the manufacturer wouldn't necessarily count --</p> <p>23 well, the finding of a manufacturer as to a severe</p> <p>24 life-altering complication wouldn't count as</p>	<p>1 just totally different?</p> <p>2 A. They're -- there's side effects and there's</p> <p>3 injuries.</p> <p>4 Q. Okay.</p> <p>5 A. And the side effect has more to do with what</p> <p>6 pertains to one particular product and an injury could</p> <p>7 be from anything that is used in surgery.</p> <p>8 Q. Do you consider a permanent injury a severe</p> <p>9 injury?</p> <p>10 MR. SNELL: Form, incomplete hypothetical.</p> <p>11 A. I apologize for that.</p> <p>12 Can you please repeat that?</p> <p>13 (The requested portion of the record was</p> <p>14 read back by the reporter.)</p> <p>15 A. There could be permanent effects of surgery</p> <p>16 that are not necessarily severe and severe that are</p> <p>17 not exactly permanent.</p> <p>18 Q. (By Mr. De La Cerda) Do you consider a</p> <p>19 risk or complication that requires additional</p> <p>20 surgeries a severe side effect?</p> <p>21 A. Based on the -- on the -- on the evidence on</p> <p>22 which -- which has a classification is not considered</p> <p>23 severe, is not considered severe if he needs just to</p> <p>24 go back to the operating room.</p>
Page 119	Page 121
<p>1 evidence under the framework that you're using;</p> <p>2 right?</p> <p>3 A. The -- the findings, whatever findings, that</p> <p>4 being from a physician, that being from a patient,</p> <p>5 that being from -- from a manufacturer or anybody</p> <p>6 else, a group -- whatever findings needs to be</p> <p>7 corroborated by evidence, that's why we have studies,</p> <p>8 that's why we have a well-placed methodology for</p> <p>9 evidence.</p> <p>10 Q. And so the medical -- well, the studies are</p> <p>11 going to be the foundation of that evidence, not some</p> <p>12 information from the manufacturer; right?</p> <p>13 A. Any -- any -- any radical information, that</p> <p>14 being of things being too good or too bad need to be</p> <p>15 evaluated on the light of a randomized control trial,</p> <p>16 needs to be evaluated on if there is no randomized</p> <p>17 control trial, needs to be evaluated based on the type</p> <p>18 of the study that we have and the clinical experience.</p> <p>19 Q. Do you consider a permanent injury a severe</p> <p>20 side effect?</p> <p>21 A. A permanent injury is different from a side</p> <p>22 effect.</p> <p>23 Q. Okay. So what -- so you don't believe that</p> <p>24 a permanent injury is a severe side effect or they're</p>	<p>1 Q. So that's not severe in your eyes.</p> <p>2 A. Yeah.</p> <p>3 Q. Do you consider risk or complication that</p> <p>4 seriously alters a patient's quality of life a severe</p> <p>5 side effect?</p> <p>6 A. It could be -- that side effect could be for</p> <p>7 improvement of a quality of life, that could be --</p> <p>8 that's an effect on the side or a side effect, the way</p> <p>9 we usually recognize it, can be deteriorating to the</p> <p>10 quality of life. I will have to look at the specific</p> <p>11 situation and look at the specific data on it.</p> <p>12 Q. Okay. Let's shift gears. The content and</p> <p>13 substance of the professional education sponsored by</p> <p>14 Ethicon on it's TVT, TVT-O, Gynemesh, Prolift and</p> <p>15 Prosima did not and does not contradict the content</p> <p>16 and substance of the IFUs for these products; correct?</p> <p>17 MR. SNELL: Form, overbroad.</p> <p>18 A. The content of the -- of these programs use</p> <p>19 the IFU.</p> <p>20 Q. (By Mr. De La Cerda) They don't</p> <p>21 contradict it; right?</p> <p>22 A. No, there is -- there is actually -- in the</p> <p>23 presentations that you're going to see, they -- they</p> <p>24 work -- they work together.</p>

31 (Pages 118 to 121)

Jaime Sepulveda, M.D.

Page 122	Page 124
<p>1 Q. Okay. Now, I figured the most efficient way</p> <p>2 to do this, because now we'll get into the substance</p> <p>3 of the various issues that you've opined on, there are</p> <p>4 many of these issues that can be grouped together as</p> <p>5 to all the products and I think that will be the</p> <p>6 fastest way to get through it, so that's what I'm</p> <p>7 going to do.</p> <p>8 So, for example, I'm about to ask you about</p> <p>9 the IFU. I'm going to ask you about -- these are</p> <p>10 general questions about the IFUs of the TVT, TVT-O,</p> <p>11 Gynemesh, Prolift and Prosima. I think we can do it</p> <p>12 all at once.</p> <p>13 A. Yes.</p> <p>14 Q. First of all, are you familiar with the</p> <p>15 contents of the various versions of the IFUs for the</p> <p>16 TVT, TVT-O, Gynemesh, Prolift and Prosima?</p> <p>17 A. I'm aware that they're -- they have changed</p> <p>18 in 2015.</p> <p>19 Q. And you're generally aware of the contents,</p> <p>20 right, of those -- of those various IFUs?</p> <p>21 A. Yes, there are IFUs that actually might be</p> <p>22 able to tell you separate steps.</p> <p>23 Q. Okay. Do you intend to offer an opinion as</p> <p>24 to whether the warnings in the IFUs for the TVT,</p>	<p>1 there, what adverse reactions would go in there, and</p> <p>2 what procedure steps would go in there? Do you know</p> <p>3 if there's any written standards that Ethicon relied</p> <p>4 on?</p> <p>5 A. I'm -- I'm aware of that. As for many</p> <p>6 products, they -- the ones that are disclosed are the</p> <p>7 ones that are specific to that product.</p> <p>8 Q. Okay.</p> <p>9 A. In other words, they're not comprehensive</p> <p>10 guides on incontinence or -- or prolapse care.</p> <p>11 Q. Okay. Have you ever, in your career, been</p> <p>12 involved in writing or preparing an IFU for a medical</p> <p>13 device?</p> <p>14 A. I have not written an IFU. I read -- I read</p> <p>15 IFUs through most of my career.</p> <p>16 Q. Have you ever studied the question of what</p> <p>17 risks and complications were known to doctors across</p> <p>18 the country with various background and levels of</p> <p>19 experience with regard to the use of the TVT, TVT-O,</p> <p>20 Gynemesh, Prolift and Prosima? Did you ever study</p> <p>21 that question?</p> <p>22 A. The risk with mesh were, with these</p> <p>23 procedures in general, were addressed in a variety of</p> <p>24 ways. And those were -- there were communications</p>
Page 123	Page 125
<p>1 TVT-O, Gynemesh, Prolift and Prosima were sufficient</p> <p>2 to apprise doctors of the risks of those products?</p> <p>3 A. Yes, I will -- I will give an opinion on</p> <p>4 that.</p> <p>5 Q. And your opinion will be that they were</p> <p>6 sufficient warnings; right?</p> <p>7 A. Yes, that will be my opinion.</p> <p>8 Q. Do you know what standards Ethicon applied</p> <p>9 in terms of what needed to be included in the warnings</p> <p>10 in the IFUs for the TVT, TVT-O, Gynemesh, Prolift and</p> <p>11 Prosima?</p> <p>12 A. That's the standards apply?</p> <p>13 Q. Yes.</p> <p>14 A. I'm aware of certain standards that were</p> <p>15 used for the IFU.</p> <p>16 Q. Okay. And what were those?</p> <p>17 A. The area on side effects, on warnings,</p> <p>18 procedure steps, and the specifics on informing about</p> <p>19 the need for specialized training to perform these</p> <p>20 procedures.</p> <p>21 Q. Do you know what -- do you know whether</p> <p>22 there's any -- are there specific, like, written</p> <p>23 standards, though, that you're aware of that Ethicon</p> <p>24 used in deciding exactly what warnings would go in</p>	<p>1 from the American College of OB/GYN, there were</p> <p>2 meetings that -- there were journals, there were so</p> <p>3 many different -- different venues that we have grown</p> <p>4 used to read and understand.</p> <p>5 The IFU, we -- we all expected that it was</p> <p>6 going to give us one specific set, but the other set</p> <p>7 on the evidence, we expected that from our -- our</p> <p>8 scientific data.</p> <p>9 Q. So back to the question, though: Did you</p> <p>10 ever study -- ever perform a study or ever study or do</p> <p>11 questionnaires that determine what doctors actually</p> <p>12 knew about these products, about the risks and</p> <p>13 complications of those products? Did you ever perform</p> <p>14 a study like that?</p> <p>15 A. There was -- to my -- to my knowledge,</p> <p>16 there's no -- not a study that have address -- address</p> <p>17 it.</p> <p>18 Q. And you, personally, haven't done a study</p> <p>19 either; right?</p> <p>20 A. No, I have not done -- done a study. I have</p> <p>21 examined forms on evaluation of surgical skills that</p> <p>22 at one time I use.</p> <p>23 Q. Okay. But on this specific question, you</p> <p>24 haven't actually performed a specific study looking at</p>

Jaime Sepulveda, M.D.

Page 126	Page 128
<p>1 what doctors actually knew about the risks and</p> <p>2 complications associated with transvaginal mesh</p> <p>3 products?</p> <p>4 A. I have not performed such study.</p> <p>5 Q. Do you agree that a surgeon should be able</p> <p>6 to solely rely on the warnings and description of risk</p> <p>7 and complications in the IFUs for the TVT, TVT-O,</p> <p>8 Gynemesh, Prolift and Prosima?</p> <p>9 MR. SNELL: Form, incomplete.</p> <p>10 A. We -- we don't rely just on the IFU.</p> <p>11 Q. (By Mr. De La Cerda) Do you agree that a</p> <p>12 surgeon should be able to just rely on the IFU or do</p> <p>13 you disagree?</p> <p>14 MR. SNELL: Same objection, asked and</p> <p>15 answered.</p> <p>16 A. I -- I disagree that a surgeon should be --</p> <p>17 rely just on the IFU.</p> <p>18 Q. (By Mr. De La Cerda) Should the IFUs for</p> <p>19 the TVT, TVT-O, Gynemesh, Prolift and Prosima</p> <p>20 include the frequency, duration and severity of</p> <p>21 risks associated with those devices?</p> <p>22 MR. SNELL: Same objection, lacks</p> <p>23 foundation.</p> <p>24 A. No. As complete as an IFU could be, as</p>	<p>1 Q. (By Mr. De La Cerda) So is that a no?</p> <p>2 A. No, that's not necessarily a no. Actually,</p> <p>3 that's -- that's exactly -- the IFU cannot -- cannot</p> <p>4 be a comprehensive guide.</p> <p>5 Q. So what -- what characteristics of these</p> <p>6 products -- strike that.</p> <p>7 Do you believe that the IFUs for the TVT,</p> <p>8 TVT-O, Gynemesh, Prolift and Prosima sufficiently</p> <p>9 address any characteristics of those products that</p> <p>10 could significantly increase their risk of severe</p> <p>11 complication?</p> <p>12 MR. SNELL: Objection.</p> <p>13 A. As it pertains to the product, yes.</p> <p>14 Q. (By Mr. De La Cerda) The information in</p> <p>15 the IFUs for the TVT, TVT-O, Gynemesh, Prolift and</p> <p>16 Prosima should be truthful; correct?</p> <p>17 A. Yes.</p> <p>18 Q. The information in the IFUs for the TVT,</p> <p>19 TVT-O, Gynemesh, Prolift and Prosima should be</p> <p>20 accurate; correct?</p> <p>21 A. Yes.</p> <p>22 Q. The information in the IFUs for the TVT,</p> <p>23 TVT-O, Gynemesh, Prolift and Prosima should be</p> <p>24 complete; correct?</p>
Page 127	Page 129
<p>1 complete as an IFU may want to be, it would not be</p> <p>2 able to address all of them. It may comply with what</p> <p>3 we expect from the IFU, but it will not be able to</p> <p>4 address every single -- every single risk that has to</p> <p>5 do with a surgery that is much more complicated than</p> <p>6 what an IFU can address.</p> <p>7 Q. (By Mr. De La Cerda) The IFUs for the TVT</p> <p>8 TVT-O, Gynemesh, Prolift and Prosima should include</p> <p>9 all known material risks associated with these</p> <p>10 products; right?</p> <p>11 MR. SNELL: Form, asked and answered.</p> <p>12 A. It should -- it should include all -- all</p> <p>13 unknown risks about the material, but not necessarily</p> <p>14 will address all known material risk.</p> <p>15 Q. (By Mr. De La Cerda) The IFUs for the</p> <p>16 TVT, TVT-O, Gynemesh, Prolift and Prosima should</p> <p>17 include all characteristics of these products that</p> <p>18 can significantly increase the risk of severe</p> <p>19 complications; right?</p> <p>20 MR. SNELL: Object to form, lacks</p> <p>21 foundation. This was asked and answered earlier.</p> <p>22 A. Is the -- the instructions for use for the</p> <p>23 device, it addresses one area. The -- the rest is</p> <p>24 based on the data.</p>	<p>1 MR. SNELL: Objection, form. Prior</p> <p>2 testimony.</p> <p>3 A. It is complete -- it is complete for the</p> <p>4 product. That's my -- my opinion.</p> <p>5 Q. (By Mr. De La Cerda) The information in</p> <p>6 the IFUs for the TVT, TVT-O, Gynemesh, Prolift and</p> <p>7 Prosima should be fair and balanced about the risks</p> <p>8 and benefits of these products?</p> <p>9 MR. SNELL: Same objection.</p> <p>10 A. It -- it should be fair and balanced for</p> <p>11 what pertains to the product.</p> <p>12 Q. (By Mr. De La Cerda) Once an IFU is out</p> <p>13 there and -- for physicians to review, if Ethicon</p> <p>14 learned of a risk or complication that was not</p> <p>15 previously warned about in the IFU and it was a</p> <p>16 significant risk or complication in terms of the</p> <p>17 harm it caused to women, do you know whether or not</p> <p>18 Ethicon had an obligation to get that information in</p> <p>19 the IFU?</p> <p>20 MR. SNELL: Objection, hypothetical, legal</p> <p>21 standard.</p> <p>22 A. As long as it's evidence-based, yes.</p> <p>23 Q. (By Mr. De La Cerda) Have you compared</p> <p>24 the differences between the IFUs for the TVT, TVT-O,</p>

33 (Pages 126 to 129)

Jaime Sepulveda, M.D.

Page 130	Page 132
<p>1 Gynemesh, Prolift and Prosima, are you aware of the</p> <p>2 differences between them?</p> <p>3 A. I have -- I have read those -- read those --</p> <p>4 and I have read them many times and I have use it to</p> <p>5 explain the procedure.</p> <p>6 Q. And so you've seen that over time there's</p> <p>7 been some updates to the IFUs; right?</p> <p>8 A. Yes, I have seen that.</p> <p>9 Q. Is there a single long-term randomized</p> <p>10 control trial for TVT, TVT-O, Gynemesh, Prolift or</p> <p>11 Prosima with safety as a primary end point?</p> <p>12 A. I -- I -- they don't -- they're not all</p> <p>13 included. There is a randomized control trial that</p> <p>14 explains about safety of Gynemesh, there is a</p> <p>15 randomized control trial that explains for Prolift.</p> <p>16 For each one of them, there's -- safety have</p> <p>17 been included. Not only have those randomized control</p> <p>18 trials explain about safety, they have -- it has</p> <p>19 spoken specifically about the percentage and the</p> <p>20 clinical significance of each one of the</p> <p>21 complications.</p> <p>22 Q. Are any of the studies that you're</p> <p>23 referencing there, has the primary end point, though,</p> <p>24 been safety in the study?</p>	<p>1 Gynemesh on -- or safety of Marlex in the use -- use</p> <p>2 on -- for cystocele repair.</p> <p>3 There's -- there are multiple studies -- I</p> <p>4 can go on with the list -- that cites safety as one of</p> <p>5 the -- of the things that they study.</p> <p>6 Q. So the point of this -- by the way, this is</p> <p>7 not my question. I never -- this question, to me,</p> <p>8 never really gets me anywhere.</p> <p>9 But the point is that all the studies that</p> <p>10 have been done on any of these mesh products, the</p> <p>11 number one end point is, is it effective; right? Is</p> <p>12 it effective and then, by the way, was it safe, too?</p> <p>13 None of these studies is like number one</p> <p>14 thing safety; right?</p> <p>15 MR. SNELL: Objection, overbroad.</p> <p>16 A. The -- there's even a better level of</p> <p>17 evidence that speaks about safety and is when you</p> <p>18 compare the use of any of these products with what</p> <p>19 has -- with the -- with the safety profile when you</p> <p>20 don't use the product. And that's where the</p> <p>21 randomized control trial comes into -- into play.</p> <p>22 The randomized control trials has the</p> <p>23 capability of evaluating something that I have use</p> <p>24 without mesh and compare it with something with mesh.</p>
Page 131	Page 133
<p>1 A. The safety -- the safety was evaluated on --</p> <p>2 on Gynemesh.</p> <p>3 Q. Do you know what the name of that study was?</p> <p>4 A. Yes, yes.</p> <p>5 Q. There is another one over here too.</p> <p>6 A. Gynemesh. Gynemesh on the -- okay. So --</p> <p>7 so on the -- to begin with the mesh, we have the</p> <p>8 Flood, F-l-o-o-d, paper on the use of Marlex.</p> <p>9 Q. And what does that study show?</p> <p>10 A. That's for the anterior colporrhaphy</p> <p>11 reinforced with Marlex mesh for treatment of</p> <p>12 cystocele.</p> <p>13 Q. Is this one of the studies that shows it has</p> <p>14 a primary end point of safety?</p> <p>15 A. It's not titled "safety," but they -- they</p> <p>16 conclude on that study that this is safe to use. And</p> <p>17 then there's Nicita, Giulia.</p> <p>18 Q. How do you spell that?</p> <p>19 A. Giulia Nicita, N-i-c-i-t-a.</p> <p>20 Q. And what is that study?</p> <p>21 A. And it shows exactly applications in terms</p> <p>22 of they were able to save -- to do it with safety.</p> <p>23 So to be accurate to the response to your</p> <p>24 question, there's no study that says safety of</p>	<p>1 And that has been used -- that has been reported for</p> <p>2 Gynemesh, it has been reported for Prolift, it has</p> <p>3 been -- was reported for -- for TVT and TVT-O, and it</p> <p>4 was so -- so consistently demonstrated that when it</p> <p>5 came to Prosima, it became a cohort study.</p> <p>6 Q. (By Mr. De La Cerda) Is it -- is it your</p> <p>7 opinion that the studies show that any time that</p> <p>8 mesh products have been compared to whatever the</p> <p>9 alternative was, a non-mesh alternative, that the</p> <p>10 mesh products have been shown to be safer than the</p> <p>11 non-mesh alternative?</p> <p>12 A. It's -- it has been shown not to have</p> <p>13 statistically significantly increased in the number of</p> <p>14 complications or the frequency of these complications.</p> <p>15 Q. Right. But that's a good point. So it's</p> <p>16 been shown to be as safe; right? And really, the</p> <p>17 differentiating factor is whether it's more effective;</p> <p>18 is that fair?</p> <p>19 A. It has been shown to be as safe and in some</p> <p>20 situations, it has been shown -- it has shown to be</p> <p>21 even safer.</p> <p>22 Take, for example, the use in the initial</p> <p>23 study of Marcus Carey on mesh, on Prosima, and</p> <p>24 straight -- and the known use of an implant.</p>

Jaime Sepulveda, M.D.

Page 134	Page 136
<p>1 When you compare, you see that the three</p> <p>2 patients that he had to operate for vaginal stenosis</p> <p>3 were the ones that did not have a mesh. So there you</p> <p>4 have an instance in which there was more complications</p> <p>5 with -- by not using mesh than by using the mesh.</p> <p>6 Is that directly related to the mesh? And</p> <p>7 that's something that could be addressed with a</p> <p>8 randomized control trial.</p> <p>9 When we do sutures, suture repairs, and we</p> <p>10 call them "native tissue repairs," in a randomized</p> <p>11 control trial or even when we do a cohort of sutures,</p> <p>12 we see complications on sutures in 36% of uterosacral</p> <p>13 ligament suspension, we see suture complications in</p> <p>14 sacrospinous ligament fixations, and when they're</p> <p>15 compared with mesh, there is -- there is much less.</p> <p>16 Q. So on the issue of whether -- you know, the</p> <p>17 FDA came out with an opinion about -- they actually</p> <p>18 described that repairs with pelvic organ prolapse mesh</p> <p>19 are no more effective and might be more dangerous than</p> <p>20 the alternative non-mesh repairs; right?</p> <p>21 MR. SNELL: Objection to foundation.</p> <p>22 A. That -- that was the -- that was an opinion</p> <p>23 that they came in, in the small panel, analyzing the</p> <p>24 data, I don't know, for two, three days, but that's</p>	<p>1 Q. You're aware that Ethicon had evidence as</p> <p>2 early as 2006 that after elongation, mechanically cut</p> <p>3 mesh has a greater tendency than laser cut mesh to</p> <p>4 degrade, lose particles, lose structure, rope, fray</p> <p>5 and curl; right?</p> <p>6 MR. SNELL: Form. Form, foundation.</p> <p>7 Go ahead.</p> <p>8 A. What -- what I saw in a picture was an</p> <p>9 uniaxial test done in a sling beyond the capabilities</p> <p>10 of a sling and beyond any forces that could be placed</p> <p>11 on a sling when used properly.</p> <p>12 Q. (By Mr. De La Cerda) But you also saw in</p> <p>13 those pictures that at least under those</p> <p>14 circumstances, the mechanically cut mesh as compared</p> <p>15 to the laser cut mesh had a tendency to lose</p> <p>16 particles, lose structure, rope, fray and curl;</p> <p>17 correct?</p> <p>18 A. They -- they show particles that we -- we</p> <p>19 have seen over -- over time, not only on that, but</p> <p>20 also in sutures. They -- in a picture, I saw a</p> <p>21 picture of it, and I saw the pictures of uniaxial</p> <p>22 testing and I saw the communications about it, but</p> <p>23 that's as much as I can say, I saw it.</p> <p>24 Q. And you know that that information was in</p>
Page 135	Page 137
<p>1 not -- I don't know for how many days they analyze it.</p> <p>2 I don't even know what papers they consider.</p> <p>3 But the preponderance of the evidence in the</p> <p>4 randomized control trial is that it's not more</p> <p>5 dangerous.</p> <p>6 Q. (By Mr. De La Cerda) Okay. So on that</p> <p>7 particular -- I'm sorry.</p> <p>8 A. I apologize. I'll just turn it off.</p> <p>9 Q. So on that particular issue, you disagree</p> <p>10 with the FDA; right?</p> <p>11 MR. SNELL: Form, foundation.</p> <p>12 I think that's misleading because there's</p> <p>13 two different time periods, Counsel.</p> <p>14 A. I -- I disagree -- I disagree with -- with</p> <p>15 the FDA opinion based on everything else that I review</p> <p>16 and that I present on my report.</p> <p>17 Q. (By Mr. De La Cerda) All right. Let's</p> <p>18 shift gears a little bit and talk some about this is</p> <p>19 a TVT and TVT-O issue.</p> <p>20 You're aware that the TVT and the TVT-O can</p> <p>21 either be mechanically cut into its sling shape or</p> <p>22 laser cut into its sling shape; right?</p> <p>23 A. It can -- the edges can be mechanically cut</p> <p>24 or laser cut or personally cut.</p>	<p>1 the files of Ethicon at least as of 2006; right?</p> <p>2 A. I -- I don't know the time when the</p> <p>3 information was.</p> <p>4 Q. Have you personally seen a TVT or TVT-O that</p> <p>5 has lost particles, lost structure, roped, frayed or</p> <p>6 curled in your practice?</p> <p>7 A. The only time that I have seen it stretch</p> <p>8 like that is when I'm actually -- one that I was</p> <p>9 removing that I put a lot of force into it. That's --</p> <p>10 that's a way much force that any patient could ever</p> <p>11 generate with a sneeze or cough.</p> <p>12 Q. You mentioned the one patient that you had</p> <p>13 that you're removing the sling where it's too tight?</p> <p>14 A. Right.</p> <p>15 Q. Is this the person you were talking about?</p> <p>16 A. That might be the same person; I cannot tell</p> <p>17 you with certainty.</p> <p>18 Q. So when the mesh was placed too tightly, you</p> <p>19 saw -- would you call that roping or what was it that</p> <p>20 you actually saw?</p> <p>21 A. I -- I -- I started dissecting it and I saw</p> <p>22 that she still had some -- and the only way I can -- I</p> <p>23 can recall it is because I actually saw those pictures</p> <p>24 yesterday in one of the -- of the slide sets.</p>

35 (Pages 134 to 137)



Jaime Sepulveda, M.D.

Page 138	Page 140
<p>1 And all I could -- all I could see was that</p> <p>2 I actually had to -- had to pull on it from inside,</p> <p>3 normal attachment. This was not roped, this was not</p> <p>4 curled, this not -- there's no such thing that I could</p> <p>5 describe in telling in general terms or in scientific</p> <p>6 terms. I -- this was one -- one anecdotal case in</p> <p>7 which I -- that's the only one that looks like the</p> <p>8 dimensions stretch -- stretch on that device.</p> <p>9 Q. So would your testimony be that you've never</p> <p>10 seen a TVT or TVT-O mechanically cut, lose particles,</p> <p>11 lose structure, rope, fray or curl in your own</p> <p>12 practice?</p> <p>13 A. No, because it has a plastic sheath.</p> <p>14 Q. So you've never seen that yourself?</p> <p>15 A. No.</p> <p>16 Q. Should the mechanically cuts -- strike that.</p> <p>17 Excuse me.</p> <p>18 Should mechanically cut meshes tendency</p> <p>19 to -- in comparison to laser cut mesh -- so should</p> <p>20 that tendency to degrade, lose particles, lose</p> <p>21 structure, rope, fray or curl be included in the IFU</p> <p>22 for the TVT and TVT-O or no?</p> <p>23 MR. SNELL: Objection, foundation.</p> <p>24 A. I don't find a need to include that because</p>	<p>1 within groups that are well-respected within my</p> <p>2 specialty, that have not describe, not in a single</p> <p>3 time, not in any of these papers, that there is such a</p> <p>4 thing happening.</p> <p>5 Q. If mechanically cut mesh's tendency in</p> <p>6 comparison to laser cut mesh to degrade, lose</p> <p>7 particles, lose structure, rope, fray and curl is</p> <p>8 clinically significant or clinically relevant, should</p> <p>9 it be included in the IFU for the TVT and TVT-O?</p> <p>10 A. It --</p> <p>11 MR. SNELL: Objection. Hold on, give me a</p> <p>12 minute.</p> <p>13 Objection, improper hypothetical based on</p> <p>14 the particle.</p> <p>15 A. It would have -- it would have to be</p> <p>16 reported. It would have to be reported by</p> <p>17 something -- by something dependent by randomized</p> <p>18 control trial.</p> <p>19 If -- any attributes that being on any of</p> <p>20 the polar sides of things -- things working at one</p> <p>21 level or another in both sides of the spectrum needs</p> <p>22 to be validated by scientific testing.</p> <p>23 Q. (By Mr. De La Cerda) This is a question</p> <p>24 that I'll have throughout several of these opinions.</p>
Page 139	Page 141
<p>1 that's something that has not been demonstrated</p> <p>2 consistently.</p> <p>3 Q. (By Mr. De La Cerda) Is that -- is that</p> <p>4 your basis for that opinion or are there</p> <p>5 additional -- is there additional information that</p> <p>6 provides a basis for that opinion?</p> <p>7 A. I have not seen any scientific evidence that</p> <p>8 the mesh curls or ropes or -- or -- or frays. Nothing</p> <p>9 that I can -- I can tell you that, okay, this is --</p> <p>10 we -- we saw this observation on this patient and we</p> <p>11 have reported it consistently or out of this number of</p> <p>12 procedures that we did, this number actually showed</p> <p>13 that. And if it happened, what is -- how does that</p> <p>14 translate into the clinical -- and I keep talking with</p> <p>15 my hands because -- that will never get into the</p> <p>16 deposition, but the -- on the -- I have not seen that</p> <p>17 be reported or how that can translate into clinical --</p> <p>18 into clinical behavior.</p> <p>19 Q. So on this issue, the basis for your opinion</p> <p>20 is really the absence of information supporting this</p> <p>21 information should be in the IFU; right?</p> <p>22 A. And the fact that there are multiple</p> <p>23 randomized control trials well -- well-designed</p> <p>24 control trials, surgical trials by good surgeons</p>	<p>1 I want to make sure to say it in a way that you</p> <p>2 would agree with, because I want you to define for</p> <p>3 me what it would require for this information to</p> <p>4 suddenly be required to be in the IFU.</p> <p>5 And so what -- what would be required from</p> <p>6 your perspective for the information about the</p> <p>7 differences between a mechanically cut and laser cut</p> <p>8 mesh on the issue of degradation, loss of particles,</p> <p>9 loss of structure, roping, fraying, curling, what</p> <p>10 would it take for that information to suddenly be</p> <p>11 information that needs to be in the IFU?</p> <p>12 MR. SNELL: Objection, same objection as</p> <p>13 before.</p> <p>14 A. To make it to the -- to the IFU, needs to be</p> <p>15 something that is independent of -- of just -- just</p> <p>16 the technique beyond what's described in the IFU. If</p> <p>17 you see something like a device or a suture breaking,</p> <p>18 it needs -- the IFU should say, do not make it so</p> <p>19 tight or place a spacer under the urethra in the case</p> <p>20 of slings. The IFU says that.</p> <p>21 So -- so -- and the insertion of the needle</p> <p>22 or the removal of the plastic sheath is being done,</p> <p>23 there needs to be instructions in the IFU for the</p> <p>24 appropriate placement. So this -- this is not about</p>

Jaime Sepulveda, M.D.

Page 142	Page 144
<p>1 saying this mesh curls or ropes or -- that's not --  2 that's not what the -- what I expect from IFU. What I  3 expect is give me the proper technique so I don't put  4 this material to this extremes that would cause it to  5 behave this way.  6 Q. (By Mr. De La Cerda) So I understand  7 the -- first it would need to be independent of the  8 technique, but if the roping, fraying, curling, loss  9 of structure, if it's clinically relevant and  10 statistically significant, that would need to be in  11 the IFU; right?  12 MR. SNELL: Objection, improper  13 hypothetical, vague.  14 A. And to the -- and to the level that it would  15 say, okay, this is -- this is how it happens in the  16 clinical setting, not just in a machine.  17 Q. (By Mr. De La Cerda) And I guess that  18 would be encompassed though -- I mean, if it's  19 statistically significant through randomized control  20 trials -- let me think about that. So it would need  21 to be shown through randomized control trials that  22 actually involve human implants, not just benched-up  23 testing or whatever it is in the lab; right?  24 A. If you blind -- if you blind this study in a</p>	<p>1 performed a study comparing mechanically cut mesh  2 versus laser cut mesh in -- actually in women; right?  3 A. It's --  4 MR. SNELL: Foundation.  5 Go ahead.  6 A. It's -- I'm not aware of any study that was  7 performed like that, in that model.  8 Q. (By Mr. De La Cerda) If mechanically cut  9 mesh, TVT or TVT-O, loses particles when its  10 implanted in a woman, is there potential for those  11 lost particles to migrate into the woman's vaginal  12 wall and cause pain?  13 A. That's a hypothesis. It has never been  14 demonstrated.  15 Q. Do you know if it's possible or no?  16 A. It's medically -- it's medically --  17 medically possible, which is way below that within  18 the -- within the settings of certain medical  19 probability.  20 Q. Okay. Still on this mechanically cut versus  21 laser cut issue. You agree that mesh -- that mesh and  22 polypropylene slings that is too stiff or rigid can  23 increase the risk of complications like erosion,  24 voiding dysfunction, and urethral obstruction; right?</p>
Page 143	Page 145
<p>1 way that physicians don't know which type of mesh  2 they're -- they're using, you could -- that would be a  3 good start.  4 Q. Okay. Do you know if Ethicon ever performed  5 a test like that, where they compared laser cut mesh  6 versus mechanically cut mesh actually implanted in  7 women?  8 A. I -- I don't see anyone placing any human  9 through the stress that a machine could do -- could do  10 that.  11 Q. But Ethicon never performed a study like  12 that; right?  13 A. I'm going to give you a better -- that was a  14 very unclear answer what I just gave you.  15 I don't see -- I don't see an implant being  16 stressed to the forces that could be done in uniaxial  17 testing. Uniaxial testing doesn't always translate  18 into the behavior in the human body.  19 The IFU was good in addressing the area that  20 was most important on the urethra and the design was  21 good in addressing the placement and the -- and the  22 confirmation of the mesh with the minimum of the  23 formation.  24 Q. But back to the question. Ethicon never</p>	<p>1 MR. SNELL: Form.  2 A. No -- no study has been able to corroborate  3 that.  4 Q. (By Mr. De La Cerda) So would you  5 disagree with that statement?  6 A. I -- I would disagree to that statement  7 based on the fact that there's no evidence confirming  8 it.  9 Q. You know that in 2004, Ethicon tested laser  10 cut mesh and found it to be more rigid or stiffer than  11 mechanically cut mesh; right?  12 A. Regardless of the findings that Ethicon may  13 have found, I'm not aware that they found one way or  14 the other, and with all the research, it would not  15 surprise me that they may have found one way or the  16 other. The question is if that has any -- any  17 translation to clinical symptoms and the ans- -- of  18 the ones you described, and my answer to that is no  19 evidence of it.  20 Q. Okay. So that leads to the next question  21 and this is a question I'm going to have with all  22 these opinions, but should laser cut mesh's greater  23 stiffness or rigidity in comparison to mechanically  24 cut mesh be included in the IFUs for the TVT and</p>

37 (Pages 142 to 145)

Jaime Sepulveda, M.D.

Page 146	Page 148
<p>1 TVT-O?</p> <p>2 MR. SNELL: Objection, lacks foundation.</p> <p>3 A. No -- no -- there's no evidence that it</p> <p>4 could work one way or the other. Why would they</p> <p>5 include it in the IFU?</p> <p>6 Q. (By Mr. De La Cerda) Okay. So let's talk</p> <p>7 about the bases for why it doesn't need to be</p> <p>8 included in the IFU. What is your basis for that?</p> <p>9 A. It's a -- the use of a laser cut or</p> <p>10 mechanical cut meshes do not translate into your</p> <p>11 procedure being performed any differently and they --</p> <p>12 with laser cut or without or with mechanical cut, what</p> <p>13 you need to be aware is not to place a sling under</p> <p>14 excessive tension, which is something that we have</p> <p>15 learned even before there was mesh, not to place a</p> <p>16 sling under excessive tension, follow good surgical</p> <p>17 principles. And if there was any question about that,</p> <p>18 then doctors could have -- could have requested to be</p> <p>19 trained on it, but I would not include something on</p> <p>20 the IFU that would just confuse the issue on how to --</p> <p>21 how to perform the procedure.</p> <p>22 Q. Okay. If laser cut mesh has greater</p> <p>23 stiffness or rigidity in comparison to mechanically</p> <p>24 cut mesh, is clinically relative and statistically</p>	<p>1 A. Yes.</p> <p>2 Q. And you're aware that Nilsson and Falconer</p> <p>3 opposed the use of laser cut mesh because it did not</p> <p>4 have the same stretch profile of mechanically cut</p> <p>5 mesh. Are you aware of that?</p> <p>6 MR. SNELL: Form.</p> <p>7 Go ahead.</p> <p>8 A. I am not aware of their internal</p> <p>9 conversations about it.</p> <p>10 Q. (By Mr. De La Cerda) And does that have</p> <p>11 any effect on your opinion one way or the other?</p> <p>12 A. It doesn't. Whatever -- whatever</p> <p>13 interaction they had, I would consider just a healthy</p> <p>14 scientific exercise, but until there's data supporting</p> <p>15 its use and there's data showing that there is a</p> <p>16 difference in performance, there is no need to make a</p> <p>17 difference -- to make a different recommendation.</p> <p>18 Q. What is the proper way to tension the TVT</p> <p>19 device?</p> <p>20 A. It's -- it's to do it tension-free and</p> <p>21 tension-free means that there is preservation of the</p> <p>22 width of the sling up to 75 percent.</p> <p>23 Q. I think I missed something. What did you</p> <p>24 mean -- can you explain that again?</p>
Page 147	Page 149
<p>1 significant, should it be included in the IFUs for the</p> <p>2 TVT and TVT-O?</p> <p>3 MR. SNELL: Objection, lacks foundation,</p> <p>4 improper hypothetical.</p> <p>5 A. There's -- there's no correlate it</p> <p>6 clinically. So my answer to that is no, I would not</p> <p>7 expect them to write in the IFU.</p> <p>8 Q. (By Mr. De La Cerda) So this is a</p> <p>9 hypothetical. I'm saying assume that it's</p> <p>10 discovered to be clinically relevant and</p> <p>11 statistically significant, under those circumstances</p> <p>12 would it then be proper to put it in the IFU?</p> <p>13 MR. SNELL: Same objection.</p> <p>14 A. If it's clinically -- clinically relevant or</p> <p>15 statistically significant, then it may have been</p> <p>16 included on the IFU if it pertains to the performance</p> <p>17 of the procedure.</p> <p>18 Q. (By Mr. De La Cerda) Now, you're aware</p> <p>19 that -- you know Ulmsten is the original -- one of</p> <p>20 the original inventors of the TVT; right?</p> <p>21 A. Yes.</p> <p>22 Q. You know a couple of the guys that studied</p> <p>23 TVT with him were Nilsson and Falconer, you remember</p> <p>24 those names being mentioned in the studies?</p>	<p>1 A. By the time that I finish doing my</p> <p>2 procedure, the width on my TVT needs to be at least</p> <p>3 1.1 -- at least 75 percent of 1.1-centimeter, that's</p> <p>4 not just with TVT --</p> <p>5 Q. Okay.</p> <p>6 A. -- that's with any sling that I may place.</p> <p>7 Q. Where is that information in the IFU?</p> <p>8 A. That's not going to be in the IFU because</p> <p>9 that's an observation of Jaime Sepulveda.</p> <p>10 Q. Do you believe that Ethicon is responsible</p> <p>11 to tell physicians how to properly tension the TVT?</p> <p>12 A. There's -- there's -- there's information on</p> <p>13 the IFU about not overtensioning.</p> <p>14 Q. There's information about that, but is there</p> <p>15 information, like an exact measurement on how to</p> <p>16 tension? For example, I liked your example of</p> <p>17 75 percent of 1.1 centimeters.</p> <p>18 Does Ethicon have a responsibility to</p> <p>19 communicate to physicians an exact way in tensioning</p> <p>20 the TVT?</p> <p>21 MR. SNELL: Form.</p> <p>22 A. I think that Ethicon make every possible</p> <p>23 effort through their -- through their education</p> <p>24 programs to -- to emphasize good practices in doing a</p>

38 (Pages 146 to 149)

Jaime Sepulveda, M.D.

Page 150	Page 152
<p>1 sling. Ethicon is not re-inventing our technique to</p> <p>2 do a continence procedure.</p> <p>3 Q. (By Mr. De La Cerda) When you taught on</p> <p>4 behalf of Ethicon regarding slings, did you discuss</p> <p>5 this issue of the 75 percent of 1.1 centimeters</p> <p>6 indicating proper tensioning?</p> <p>7 A. That's a concept that we all have -- have --</p> <p>8 we, as surgeons, we know we don't want to bring it</p> <p>9 tighter than that. But we learned that with the</p> <p>10 pubourethral slings.</p> <p>11 Q. Okay. So are you saying no, you didn't</p> <p>12 personally discuss that issue or because everyone</p> <p>13 already knew it anyway?</p> <p>14 A. Right. This is -- this is a common surgical</p> <p>15 knowledge, which Ethicon may or may not have known. I</p> <p>16 don't know if they -- if they knew it. This is just a</p> <p>17 personal observation.</p> <p>18 Q. So you believe that Ethicon properly</p> <p>19 instructs physicians on how to tension the TVT; right?</p> <p>20 A. They -- they cover that in the IFU.</p> <p>21 Q. Do you agree that the strongest unmet need</p> <p>22 with the TVT is the ability to adjust tension both</p> <p>23 intraoperatively and post-operatively?</p> <p>24 MR. SNELL: Form.</p>	<p>1 A. That's -- that's part of the art of surgery</p> <p>2 that I described before.</p> <p>3 Q. So you do agree with that; right?</p> <p>4 A. Repeat that.</p> <p>5 Q. So do you agree with, quote, there is no</p> <p>6 calibration to let you know when you have the tension</p> <p>7 right, close quote?</p> <p>8 A. No, we know -- we know when the tension is</p> <p>9 right. We have experience -- enough experience to</p> <p>10 know when the tension is right.</p> <p>11 It's extremely subjective, but I can tell</p> <p>12 you if you, at the end of your surgery, you see that</p> <p>13 width that goes underneath, that width that has been</p> <p>14 shown study after study, that is effective, if you</p> <p>15 know that is not the width you have at the end of your</p> <p>16 surgery, you overtensioned it.</p> <p>17 Q. But there's not like a general calibration</p> <p>18 for that; right? Or is there? I mean, is the general</p> <p>19 calibration the 75 percent of 1.1 centimeters, is that</p> <p>20 the general calibration for everybody or no?</p> <p>21 MR. SNELL: Form.</p> <p>22 A. It's a visual inspection.</p> <p>23 Q. (By Mr. De La Cerda) So is that a yes?</p> <p>24 MR. SNELL: Objection, asked and answered.</p>
Page 151	Page 153
<p>1 A. Well, there's no -- no way to assess</p> <p>2 post-operatively. You're going to close and there's</p> <p>3 no -- no study that says how you're going to tension</p> <p>4 it. We try to make an inference with biomechanics.</p> <p>5 Q. (By Mr. De La Cerda) But do you agree</p> <p>6 with that statement? That the strongest unmet need</p> <p>7 of the TVT's ability to adjust tension both</p> <p>8 intraoperatively or post-operatively, do you agree</p> <p>9 or disagree with that statement?</p> <p>10 A. I --</p> <p>11 MR. SNELL: Form.</p> <p>12 Go ahead.</p> <p>13 A. I would agree to an extent, but it's so --</p> <p>14 so vague that I cannot tell you that I agree</p> <p>15 completely with it.</p> <p>16 Q. (By Mr. De La Cerda) Do you agree that</p> <p>17 the mesh and TVT may be too wide?</p> <p>18 MR. SNELL: Form.</p> <p>19 A. I don't -- no, I think it has shown to be of</p> <p>20 the -- of the right -- of the right width to work</p> <p>21 clinically.</p> <p>22 Q. (By Mr. De La Cerda) Do you agree that</p> <p>23 there is no calibration to let you know when you</p> <p>24 have the tension right?</p>	<p>1 A. Yeah, that's a general calibration that is</p> <p>2 been used -- I'm sorry, Burt.</p> <p>3 MR. SNELL: I said, objection, asked and</p> <p>4 answered.</p> <p>5 Go ahead and answer it.</p> <p>6 Q. (By Mr. De La Cerda) Do you agree that</p> <p>7 there is no -- quote, there is no consensus on the</p> <p>8 amount of tension needed and many feel that the</p> <p>9 tension will vary based on patient presentation and</p> <p>10 patient anatomy? Do you agree with that?</p> <p>11 MR. SNELL: Form.</p> <p>12 A. It's -- I would have to agree that it</p> <p>13 changes from patient to patient and that's one of the</p> <p>14 biggest challenges not only in this proceeding, any</p> <p>15 surgery.</p> <p>16 Q. (By Mr. De La Cerda) Are you going to</p> <p>17 offer the opinion that tensioning of the TVT sling</p> <p>18 is the same regardless of whether the sling is made</p> <p>19 of mechanically cut mesh or laser cut mesh?</p> <p>20 A. You're going to visually see at the end of</p> <p>21 your procedure and you know if you tensioned it right</p> <p>22 when you look at it.</p> <p>23 Q. So tensioning might change as long as the</p> <p>24 width that you're looking for is correct?</p>

Jaime Sepulveda, M.D.

Page 154	Page 156
<p>1 A. I just say visually see. I don't know how 2 another way you're going to see if it's not visually. 3 Q. Right. 4 A. But it's -- what I -- my opinion is that 5 once you -- once you place a sling, that being laser 6 cut or mechanically cut, at the end of your procedure, 7 that sling needs to look the way -- in a way that it 8 covers the mid urethra to an extent of at least .75 to 9 1-centimeter. 10 Q. Do you agree that a responsible medical 11 device company would determine the proper way to place 12 a device before putting that product on the market? 13 MR. SNELL: Form. 14 A. They -- they have no way -- we have no way 15 to -- to -- to communicate that to each other. That 16 is -- that is the hard part of surgery. 17 I think that when they say, "Do not 18 overtension it," and when they say, "You need to have 19 experience in continence procedures," and when they 20 say, "This is not a comprehensive guide for continence 21 care," I think that's accurate and fair and as a 22 surgeon you understand that. 23 Q. (By Mr. De La Cerda) And so this question 24 is really more of a general proposition, though.</p>	<p>1 There's a fault question on -- earlier we 2 discussed your work as a consultant for Ethicon and we 3 briefly discussed what you estimated to be what you 4 had received from Ethicon in compensation for that. 5 In another case, the Raviola case, which you 6 may recall, there was actually a production of the 7 payments and it was produced in a -- in hard copy -- 8 and this question is probably really for Burt. 9 MR. DE LA CERDA: If I forward that to you, 10 can you send that to us in like an Excel or 11 whatever it originally came in because the print 12 is tiny? 13 MR. SNELL: Okay. Yeah, I mean -- well, I 14 can do my best. 15 MR. DE LA CERDA: Okay. 16 MR. SNELL: I've been trying to send 17 e-mails. My e-mail is not working. It's not 18 letting me send stuff. I have something 19 important to send. It's not related to this 20 deposition. I've been trying all morning. Is 21 the Internet -- 22 MR. DE LA CERDA: It's coming off and on for 23 me. 24 I'm forwarding this to you and then if we</p>
Page 155	Page 157
<p>1 Would you agree that a responsible medical device 2 company would determine the proper way to place a 3 device before putting that product on the market? 4 MR. SNELL: Same objection, asked and 5 answered. 6 A. That's where -- that's where all the studies 7 with cadavers come in. 8 Q. (By Mr. De La Cerda) So the answer is 9 yes; right? 10 A. Yes, the device company does that. 11 Q. Okay. Shifting gears to a new issue. 12 Before I do that, are you okay? Do you want 13 to take a break at all? 14 A. No, I'm okay, if you guys are okay. 15 MR. SNELL: What time are we going to have 16 lunch? 17 MR. DE LA CERDA: Yeah, it's almost noon. 18 Do you want to do it now. 19 MR. SNELL: If he's fine, I'm fine. 20 (Thereupon, a recess was taken from 21 11:47 a.m. until 12:00 p.m., after which the 22 following proceedings were held:) 23 Q. (By Mr. De La Cerda) So we're back on the 24 record.</p>	<p>1 can get the native version. It looks like it was 2 an Excel that was then printed off, but the type 3 on it is really small and then that will 4 provide -- this is what Ethicon shows its records 5 of payments and then that can kind of settle that 6 issue. 7 THE WITNESS: Yeah, it was actually 8 presented on the Cavness trial. 9 MR. DE LA CERDA: Oh, okay. 10 THE WITNESS: It was in very small -- very 11 small letters. 12 MR. DE LA CERDA: Okay. 13 THE WITNESS: And just as clarifying that 14 number, what was allocated to pay me, not actual 15 payments. 16 MR. DE LA CERDA: Okay. So we'll have to 17 clear that up, but if, Burt, you can take a look 18 at getting us that version, thanks. 19 Q. (By Mr. De La Cerda) Okay. All right. 20 The issues that I'm about to discuss will relate to 21 TVT, TVT-O, Gynemesh, Prolift and Prosima, so I'm 22 going to do it all at once. 23 First, you're aware that the TVT and TVT-O 24 are made of Prolene mesh, which is constructed of</p>

40 (Pages 154 to 157)



Jaime Sepulveda, M.D.

Page 158	Page 160
<p>1 knitted filaments of extruded polypropylene strands,  2 identical in composition to that used in Prolene  3 polypropylene nonabsorbable surgical suture; correct?  4 A. I agree with that.  5 Q. You're also aware that the mesh in Gynemesh,  6 Prolift, and Prosima is Prolene Soft, which is also  7 constructed of knitted filaments of extruded  8 polypropylene identical in composition to Prolene  9 polypropylene suture; correct?  10 A. To a -- to a -- identical in composition,  11 yes.  12 Q. And the IFUs for the TVT, the TVT-O,  13 Gynemesh, Prolift and Prosima all characterize Prolene  14 as inert; correct?  15 A. They -- they characterize it as that word  16 inert, yeah.  17 Q. They state: "This material, when used as a  18 suture, has reported to be nonreactive and retain its  19 strength indefinitely in clinical use"; right?  20 A. I -- I'm aware of that statement, yes.  21 Q. They also -- the IFUs for those products  22 also state: "The material is not absorbed nor is it  23 subject to degradation or weakening by the action of  24 tissues enzymes"; right?</p>	<p>1 strength of the suture on testing that was done before  2 placing it on a patient.  3 Q. (By Mr. De La Cerda) Okay. So why would  4 it be desirable for a human implant to have those  5 characteristics that it doesn't degrade, that it's  6 inert, that's it's nonreactive?  7 MR. SNELL: Same objection.  8 Go ahead.  9 A. It is -- it translates, theoretically, on  10 the durability of the repair.  11 Q. (By Mr. De La Cerda) Because these mesh  12 implants are intended to be permanent implants;  13 correct?  14 A. They're intended to -- to last a lifetime if  15 you can make it interact in a way that it can last a  16 lifetime. In other words, if the host doesn't change,  17 you'll want that implant to work and give you  18 durability.  19 Q. Now you're aware that as early as 1987,  20 Ethicon had evidence of degradation of Prolene in the  21 human body; correct?  22 A. I -- I don't believe that they call it  23 degradation in the sense that we interpret  24 degradation. There's -- there's degradation from the</p>
Page 159	Page 161
<p>1 A. That's a statement on the IFU.  2 Q. The mesh in these products not being -- or  3 strike that.  4 The mesh in these products being nonreactive  5 or inert or not subject to degradation, that's a  6 property or those are properties that are desirable  7 for an implant designed for a human body; right?  8 MR. SNELL: Form, overbroad.  9 A. That -- that is -- that is a characteristic  10 that we did not see in other types of materials and  11 that we're pursuing when we placed those sutures.  12 Q. (By Mr. De La Cerda) Okay. Why would you  13 want a human -- an implant designed to be implanted  14 in humans to be inert or nonreactive or not subject  15 to degradation?  16 MR. SNELL: Objection, overbroad.  17 Go ahead.  18 A. The degradation has to -- has to do with --  19 the way we interpret degradation has to do with  20 absorbables or partially absorbable sutures.  21 The way that non- -- nonreactive means that  22 there's no reaction to hydrolysis.  23 And the way that it was described as non- --  24 nondegraded is it was that there was no loss on the</p>	<p>1 biomechanical point of view and there's degradation  2 from what we see in normal life of degradation.  3 Q. Okay. So what is it that you believe that  4 Ethicon saw in terms of degradation in 1987?  5 A. Well, what they saw -- what they saw is  6 purely a microscopic study. If there will be  7 degradation, there will be a significant impact on the  8 durability of the effect of the sling or in the  9 durability of the repair.  10 Q. In the context of safety, though -- strike  11 that.  12 If Prolene has a tendency to degrade in a  13 human body, would that indicate that it's not inert?  14 MR. SNELL: Form, improper hypothetical.  15 A. If it would degrade, it would dissolve. And  16 if it would dissolve, it would just lose all its  17 effect. So whatever -- whatever conclusion is met of  18 degradation is on hypothetical grounds and not based  19 on the evidence that we have.  20 Q. (By Mr. De La Cerda) What evidence are  21 you referencing?  22 A. The durability of a procedure for  23 incontinence on prolapse.  24 (Brief interruption and off the record discussion.)</p>

41 (Pages 158 to 161)

Jaime Sepulveda, M.D.

<p style="text-align: right;">Page 162</p> <p>1 Q. I can't remember if you were finished with 2 your response. If you could read it back. 3 (The requested portion of the record was 4 read back by the reporter.) 5 A. Let me clarify this. The reason why I 6 generalize it on incontinence on prolapse is because 7 we're talking about more than one product here. 8 Q. (By Mr. De La Cerda) Yes, yes. 9 And all these products have, within their 10 mesh -- one mesh is called regular Prolene or just 11 Prolene and the other one is called Prolene Soft, but 12 both meshes are made of essentially woven Prolene 13 suture. It's the same material as Prolene; right? 14 MR. SNELL: Objection. 15 A. No, it's not woven. 16 Q. (By Mr. De La Cerda) How is it made then? 17 A. It's knitted. 18 Q. Knitted, okay. 19 But it's all made of knitted polypropylene 20 that's identical in composition to Prolene; correct? 21 A. It's knitted -- it's knitted extruded 22 polypropylene. 23 Q. It's identical in composition to Prolene 24 suture; right?</p>	<p style="text-align: right;">Page 164</p> <p>1 A. And there is -- first of all, there is 2 more -- there are three -- there are three parts to 3 that question. The first one is the concept of 4 degradation. And if Prolene would degrade, all the 5 Burches that we did with polypropylene would 6 eventually fail. And all the -- and most of the 7 slings that we did with polypropylene would eventually 8 fail clinically. 9 And we know that the evidence points out 10 that that's -- that's not the case. That's the first 11 part of degradation. 12 Number two is polypropylene, the way it 13 defines degradation on a dog or in a rabbit or in a 14 Himalayan or a Wistar rat or a Himalayan -- Himalayan 15 rabbit, the way it's defined cannot be translated 16 to -- to a -- to a person because they're completely 17 different hosts and the stresses that are placed on -- 18 on those implants are completely different. 19 The immunologic reaction is different and 20 the cellular level is different, cellular findings are 21 different. And, finally, is the concept that -- that 22 Prolene and -- would -- would degrade and create 23 anything beyond what the sling would create. No, they 24 stay -- they're both exactly the same, the same. Not</p>
<p style="text-align: right;">Page 163</p> <p>1 A. It is -- it has been shown to have the same 2 level of crystallinity as Prolene suture. 3 Q. If there were findings as to Prolene suture, 4 would those findings, the characteristics of Prolene 5 suture, have relevance to meshes that are also made of 6 extruded polypropylene that's identical in composition 7 to Prolene suture? 8 MR. SNELL: Form, vague. 9 A. I did not get that one. Sorry. 10 (The requested portion of the record was 11 read back by the reporter.) 12 A. As it pertains to composition, the evidence 13 shows that TVT-O and Prolene sutures, that's the 14 extent of the evidence, has -- has the same 15 crystallinity. When we define crystallinity, is the 16 most accurate way to evaluate that one material is 17 like the other. 18 Q. (By Mr. De La Cerda) Well, what I'm 19 saying, though, is if there is a finding about a 20 characteristic of Prolene sutures like, for example, 21 degradation, if Prolene sutures degrade in the human 22 body, can we also say or is that evidence of that 23 Prolene mesh would also degrade in the human body? 24 MR. SNELL: Form.</p>	<p style="text-align: right;">Page 165</p> <p>1 exactly, but they're both very similar implants. 2 So those are the three -- three aspects to 3 your question, and I know it's an extremely elaborate 4 answer for probably a much more straightforward 5 question. But there's -- the concept of degradation, 6 I would have to accept that concept to agree with 7 your -- with what you just presented. 8 Q. (By Mr. De La Cerda) I think step one is 9 we need to define what we're talking about by 10 degradation. 11 We know that in 1987 there was a study done 12 by Ethicon on explanted Prolene suture from humans; 13 right? 14 A. On explanted and not -- I believe it's from 15 the dog study. 16 Q. There is one of humans, too. Have you seen 17 that one? 18 A. No, I haven't -- haven't. I'm not aware of 19 that one. 20 Q. Okay. If there's a study from 1987 on -- 21 and these are Prolene sutures explanted from humans, 22 if those show the cracking and degrading that's 23 indicative of degraded polypropylene, that's the kind 24 of degradation that I'm talking about.</p>

42 (Pages 162 to 165)

Jaime Sepulveda, M.D.

Page 166	Page 168
<p>1 A. Are you referring to the eye study?</p> <p>2 Q. I'm sorry?</p> <p>3 A. To the eye study. Are you referring to the</p> <p>4 polypropylene being removed from the eye?</p> <p>5 Q. Vascular -- I believe they were implanted in</p> <p>6 the heart. Unfortunately, I didn't bring that study</p> <p>7 with me. I assumed you would already be aware of it.</p> <p>8 My understanding is they were explanted from</p> <p>9 the hearts of the patients. They were Prolene sutures</p> <p>10 explanted from the heart of human patients.</p> <p>11 Are you aware of that one?</p> <p>12 A. No, I'm not aware. I know there is a study</p> <p>13 on blood vessels and I know that there is a study</p> <p>14 of -- on the eye and I know about the dog study.</p> <p>15 Q. Okay.</p> <p>16 MR. SNELL: For clarification purposes, you</p> <p>17 have -- maybe if you knew -- I can tell you -- I</p> <p>18 know what the name of it is. I mean, if that</p> <p>19 would ring a bell with him.</p> <p>20 MR. DE LA CERDA: Professor --</p> <p>21 MR. SNELL: Gudion, blood vessels.</p> <p>22 THE COURT REPORTER: Can you spell that one?</p> <p>23 MR. DE LA CERDA: I think it's G-u-d-o-i-n</p> <p>24 or something like that. That's the professor's</p>	<p>1 on and when they look at that cracking, it's</p> <p>2 believed to be polypropylene that's cracking and</p> <p>3 degrading.</p> <p>4 Now you've seen studies that have discussed</p> <p>5 that issue; right?</p> <p>6 A. I'm -- I'm aware of the paper by Clavé.</p> <p>7 Q. Okay.</p> <p>8 A. By one of the Clavés, by the way, not --</p> <p>9 Q. Is there a brother, like an evil twin?</p> <p>10 A. So I am aware of that paper and in that same</p> <p>11 paper they cite the UV -- ultraviolet degradation, but</p> <p>12 I am also aware that that paper was about normal</p> <p>13 samples.</p> <p>14 I'm also aware that the number of</p> <p>15 low-density polypropylene study was less than -- I</p> <p>16 believe it was a quarter of the sample and -- I don't</p> <p>17 have to believe it, I actually have it here.</p> <p>18 Q. You're welcome to pull out anything you'd</p> <p>19 like to review.</p> <p>20 What I'm trying to get at -- I'm just trying</p> <p>21 to get us to agree at least on a definition of</p> <p>22 degradation that I'm going to ask you about. And what</p> <p>23 I'm trying to say is that's the version of degradation</p> <p>24 I'd like to ask you about.</p>
Page 167	Page 169
<p>1 last name.</p> <p>2 Q. (By Mr. De La Cerda) Does that ring a</p> <p>3 bell?</p> <p>4 A. It's -- I am -- I read that. I do recall</p> <p>5 reading it and I do recall that it was a very thin</p> <p>6 polypropylene suture that was hand tied, but</p> <p>7 there's -- I don't know how that translate to</p> <p>8 degradation.</p> <p>9 Q. (By Mr. De La Cerda) Okay. So the</p> <p>10 finding in that study was at the surface, that there</p> <p>11 was cracking on the surface of the suture; right?</p> <p>12 And that when they tested the material from the</p> <p>13 cracking, that it was indicative of oxidative</p> <p>14 degradation to polypropylene; right?</p> <p>15 MR. SNELL: I'm going to object on</p> <p>16 foundation.</p> <p>17 Go ahead.</p> <p>18 A. I cannot confirm that, no.</p> <p>19 Q. (By Mr. De La Cerda) Okay. Well, what</p> <p>20 I'm trying to do is define the degradation I'm</p> <p>21 talking about. And I think this is even in the</p> <p>22 studies that discuss it, degradation, and there have</p> <p>23 been in the studies discussion of the surface of</p> <p>24 polypropylene has some sort of cracking that's going</p>	<p>1 Now, I know you're already going to tell me</p> <p>2 that's not clinically significant. I know you're</p> <p>3 going to tell me it's not going to matter. I know</p> <p>4 that. What I'm trying to first get is let's get an</p> <p>5 agreement on that's the degradation I'm talking about</p> <p>6 and then we can go through the -- to kind of finish up</p> <p>7 the questions because you'll end up telling me that it</p> <p>8 doesn't need to be in the IFU.</p> <p>9 So focusing, first, on the degradation, the</p> <p>10 version that I'm talking about is the cracking, the</p> <p>11 surface cracking that happens of the polypropylene</p> <p>12 that's at least been seen and reported on in some of</p> <p>13 the studies. Is that version of degradation, is that</p> <p>14 clinically significant or clinically relevant such</p> <p>15 that it needs to be in the IFU for the TVT, TVT-O,</p> <p>16 Gynemesh, Prolift and Prosima?</p> <p>17 MR. SNELL: Objection, lacks foundation.</p> <p>18 Go ahead.</p> <p>19 A. The way it stands right now, with the</p> <p>20 studies that I have seen, specifically the ones on --</p> <p>21 in general polypropylene -- the ones on the eye, I</p> <p>22 believe I saw that. The way it stands right now, that</p> <p>23 type of degradation has not been shown on the -- on</p> <p>24 actual samples of slings. It has been shown in</p>

43 (Pages 166 to 169)

Jaime Sepulveda, M.D.

Page 170	Page 172
<p>1 abnormal samples, not in slings that work or come --</p> <p>2 or have the clinical results that we have seen on</p> <p>3 reports and it have -- it have not been shown in</p> <p>4 any -- any studies having a clinical impact.</p> <p>5 Q. (By Mr. De La Cerda) Okay. What do you</p> <p>6 mean by "abnormal slings"?</p> <p>7 A. If there is a sling that has an exposure,</p> <p>8 and especially slings that are exposed to a surface,</p> <p>9 then that will be abnormal sample.</p> <p>10 Q. Okay. Exposed to what kind of surface?</p> <p>11 A. To the vagina or the bladder or the bowel.</p> <p>12 Q. Okay. So is there something that's</p> <p>13 happening during that exposure that -- that your</p> <p>14 belief is causing this phenomenon of degradation?</p> <p>15 MR. SNELL: Objection. Hold on.</p> <p>16 Misstates -- I don't think he testified, Counsel,</p> <p>17 that he believes in degradation. I think you're</p> <p>18 taking what he said -- I think you're misstating</p> <p>19 his answer.</p> <p>20 Go ahead.</p> <p>21 A. The -- what we see in abnormal slings is</p> <p>22 that a biofilm is created and this biofilm is -- has</p> <p>23 been seen in catheters, it has been seen in IUDs, it</p> <p>24 has been seen in other implants that are exposed to</p>	<p>1 storage. This is completely different from -- from</p> <p>2 what is used in slings in prolapse. So there's --</p> <p>3 it's a hypothesis. That's probably upgrading it to a</p> <p>4 hypothesis.</p> <p>5 Q. Ultimately you believe, though, that the</p> <p>6 cracking that's seen when the studies are discussing</p> <p>7 degradation is really a biofilm and not the</p> <p>8 polypropylene itself; right?</p> <p>9 A. I -- I don't know if it's the biofilm or</p> <p>10 it's a matter of technique or if it's a stressor that</p> <p>11 was placed on the sample on retrieval. We -- we don't</p> <p>12 know that. And most -- most importantly, we know that</p> <p>13 probably any -- regardless of the reason why it</p> <p>14 happens, it doesn't translate in any physical outcome,</p> <p>15 in a clinical significant outcome.</p> <p>16 Q. What about the erosions, though? So you</p> <p>17 mentioned that they were abnormal meshes that had</p> <p>18 eroded and were exposed to air, isn't the fact there</p> <p>19 is an erosion, isn't that some sort of clinical --</p> <p>20 clinically significant event?</p> <p>21 MR. SNELL: Form.</p> <p>22 A. No, the exposed segment of the sling doesn't</p> <p>23 mean that it eroded. The most frequently -- the</p> <p>24 most -- normally, the most frequent reason why you see</p>
Page 171	Page 173
<p>1 air.</p> <p>2 Q. (By Mr. De La Cerda) Okay. So is that --</p> <p>3 is that your explanation of what you believe is</p> <p>4 actually being seen when we see this cracking?</p> <p>5 A. That -- that is -- that is actually what --</p> <p>6 what I see, the only correlation that I can put</p> <p>7 together with the cracking.</p> <p>8 There's no other explanation based on what I</p> <p>9 know and what I have researched that mechanical stress</p> <p>10 retrieval or a biofilm.</p> <p>11 Q. Okay. We know -- well, you know that raw</p> <p>12 polypropylene without any antioxidants would degrade</p> <p>13 in the human body. Do you know that or no? Or do you</p> <p>14 believe that or no?</p> <p>15 A. No, there's no evidence that there's</p> <p>16 degradation.</p> <p>17 Q. Okay. Do strong oxidizers like peroxide, do</p> <p>18 those affect raw polypropylene or no?</p> <p>19 A. The only report that I was able to find on</p> <p>20 it was in containers, which is different from this --</p> <p>21 it's the same hydrocarbon, but different containers on</p> <p>22 a surface outside.</p> <p>23 Q. Okay.</p> <p>24 A. Actual containers that were used for</p>	<p>1 an exposed sling or a mesh is because there's a bone</p> <p>2 healing that -- the dehiscence of the wound, there is</p> <p>3 a dehiscence of the wound, there is a disorder of the</p> <p>4 wound healing.</p> <p>5 So we have seen disorders of wound healing</p> <p>6 in patients that have prolapse even before we place --</p> <p>7 we replace it, and we actually have seen it with</p> <p>8 sutures. Not only with polypropylene sutures, we have</p> <p>9 seen it with polyester sutures, specifically, and we</p> <p>10 have seen it with GORE-TEX sutures.</p> <p>11 And there's actual clinical evidence that</p> <p>12 shows these abnormal wound healing occurring on the</p> <p>13 presence of these sutures, and also with native</p> <p>14 tissue. So this is not that the sling work itself</p> <p>15 around and erode. This is an incision that has been</p> <p>16 open.</p> <p>17 Q. (By Mr. De La Cerda) And is there any --</p> <p>18 and what's responsible for the poor wound healing or</p> <p>19 the wound healing issue?</p> <p>20 A. There are a variety of factors. These are</p> <p>21 defects in the fibromuscular layer, specifically, as I</p> <p>22 place -- as I wrote in my report, loss of tensile</p> <p>23 strength in the abdominal sutures that put the wound</p> <p>24 together.</p>

44 (Pages 170 to 173)

Jaime Sepulveda, M.D.

Page 174	Page 176
<p>1 Number two, there are mechanical factors.</p> <p>2 Number three, there are actual wound-healing</p> <p>3 factors, such as immune disorders, poor tissue</p> <p>4 healing, cigarette smoking, and finally hematomas,</p> <p>5 just to mention a few.</p> <p>6 And these conditions may predispose a wound</p> <p>7 to open and expose the graft. It may predispose the</p> <p>8 wound not to heal properly over a suture and it may</p> <p>9 predispose the wound not to heal properly just over</p> <p>10 native tissue.</p> <p>11 Q. Have you -- are you aware of an exposure and</p> <p>12 erosion ever happening not related to a wound healing</p> <p>13 issue?</p> <p>14 A. No, that's -- that's -- is a problem of</p> <p>15 wound healing.</p> <p>16 Q. And that's it?</p> <p>17 A. And that's what I see consistently.</p> <p>18 Q. But it's your belief that that's the only</p> <p>19 reason why there might be an exposure or erosion is</p> <p>20 because of wound healing; right?</p> <p>21 A. It is the most viable factor of the three</p> <p>22 fact- -- of the three -- of the interaction between a</p> <p>23 graft on a host, is the most viable factor is the</p> <p>24 host. And the -- the sling's consistent. Or the --</p>	<p>1 that those with the most experience have the lowest</p> <p>2 rate of -- lowest rate of problems. Not only this</p> <p>3 surgery, any other surgery, but the most consistent</p> <p>4 part is the prosthesis, the polypropylene.</p> <p>5 Q. Do you believe that mesh degrading or</p> <p>6 breaking down can lead to an erosion or exposure or</p> <p>7 no?</p> <p>8 MR. SNELL: Foundation.</p> <p>9 A. There's -- there's no evidence that that's</p> <p>10 the case.</p> <p>11 Q. (By Mr. De La Cerda) Do you believe that</p> <p>12 polypropylene can become brittle?</p> <p>13 A. How -- how do we define brittle?</p> <p>14 Q. That's a good question.</p> <p>15 A. You're going to probably --</p> <p>16 Q. What's your understanding of the term</p> <p>17 "brittle"?</p> <p>18 A. Brittle is weak. Brittle could be friable.</p> <p>19 Decreased tensile strength to put it in exact terms.</p> <p>20 Q. So using that explanation of what brittle</p> <p>21 means to you, do you believe that polypropylene can</p> <p>22 become brittle?</p> <p>23 A. No.</p> <p>24 Q. Okay. So now let's get to the question</p>
Page 175	Page 177
<p>1 or the polypropylene is a consistent material. And</p> <p>2 there's obviously the third one, which is the</p> <p>3 insertion, the technique, but if you really look at</p> <p>4 technique being constant, it's always a wound healing</p> <p>5 issue.</p> <p>6 Q. So one of the problems could be the doctor's</p> <p>7 fault, the other problem could be the patient's fault</p> <p>8 because of their body and their wound healing, but</p> <p>9 third issue can't be the implant because it is what it</p> <p>10 is and it's --</p> <p>11 A. I would not simplify just with it being a</p> <p>12 fault. We -- this is not -- these are not issues that</p> <p>13 are just -- that just happened with -- with mesh.</p> <p>14 We -- we know that these issues go way -- for any</p> <p>15 prosthetic material, way back before any prosthetic</p> <p>16 material. We know that these issues happen with</p> <p>17 polyester sutures in uterosacral ligament suspensions.</p> <p>18 We know that there are instances in which there has</p> <p>19 been no mesh, there being a suture and the suture had</p> <p>20 to be removed. And we know there are instances in</p> <p>21 which we don't use a mesh at all and that incision</p> <p>22 opens up. The most viable aspect is the host.</p> <p>23 There's definitely a variation on the insertion</p> <p>24 technique and I think that by now we all have evidence</p>	<p>1 about your opinion. Should Prolene's tendency to</p> <p>2 degrade in the human body be included in the IFUs for</p> <p>3 the TVT, TVT-O, Gynemesh, Prolift and Proxima?</p> <p>4 MR. SNELL: Lacks foundation, misstates,</p> <p>5 opinion testimony.</p> <p>6 A. There's -- there's nothing to place the</p> <p>7 result of degradation.</p> <p>8 Q. (By Mr. De La Cerda) And your basis for</p> <p>9 that opinion is what?</p> <p>10 MR. SNELL: Asked and answered.</p> <p>11 A. That degradation has not been defined in a</p> <p>12 reproducible scientific way to have -- to be present</p> <p>13 or, if present, to have any consequences in clinical</p> <p>14 outcomes.</p> <p>15 MR. DE LA CERDA: All right. I think that's</p> <p>16 a good break point. It's 12:30.</p> <p>17 (Thereupon, a lunch recess was taken from</p> <p>18 12:30 p.m. until 1:20 p.m., after which the</p> <p>19 following proceedings were held:).</p> <p>20 Q. (By Mr. De La Cerda) All right. Doctor,</p> <p>21 we're back on the record. There is one question I</p> <p>22 wanted to ask you on the degradation issue.</p> <p>23 If Prolene's tendency to degrade the human</p> <p>24 body is clinically significant, clinically relevant</p>

45 (Pages 174 to 177)



Jaime Sepulveda, M.D.

Page 178	Page 180
<p>1 and statistically significant, should that information  2 be included in the IFUs for the TVT, TVT-O, Gynemesh,  3 Prolift and Prosima?  4 MR. SNELL: Objection, foundation, form.  5 Go ahead.  6 A. Any -- any significant clinical response  7 that deviates from what's reported in randomized  8 control trials should be -- should be a matter of  9 addressing it, regardless if there is a degradation  10 there underneath or not. And there -- there are  11 systems in place that allows for that reporting, more  12 than one system, actually.  13 Q. (By Mr. De La Cerda) So any risk or  14 complication that's clinically significant,  15 clinically relevant and statistically significant,  16 any risk or complication that's like that should be  17 included in the IFU, do you agree with that?  18 MR. SNELL: Form, foundation, misstates.  19 A. If there's -- anything that is clinically  20 significant, statistically significant, let's say we  21 have a voiding dysfunction that is higher than would  22 happen with a Burch procedure, if we have pain, any  23 type of an incidence of urge incontinence or urge  24 incontinence, incidents of any -- that should be</p>	<p>1 elution method showed cell lysis and toxicity;  2 correct?  3 A. There was one other place, and I was able to  4 see that on company documents. There was one other  5 place in which they saw that there was a little  6 cytotoxicity, but when it was -- it could never be  7 reproduced, actually, when it was redone in the  8 agarose, in the agarose form, there was -- in the  9 agarose overlay method, it was not -- it was not  10 cytotoxicity.  11 And this is significant because the -- when  12 you do a drug elution test, essentially, you're  13 immersing the cells on a pool of this -- of this  14 polypropylene. It will be -- it's a huge amount.  15 It's an amount that you, on purpose, make it -- make  16 it toxic. The toxicity -- the toxicity is -- is  17 supposed to affect a lot more than this.  18 One of the biggest drawbacks of cytotoxicity  19 assays is that you cannot have a positive control. So  20 when you put agarose on it, you neutralize and you  21 make it more real. You neutralize it and make it more  22 real.  23 Q. In one of those two testing methods  24 cytotoxicity was shown; right?</p>
Page 179	Page 181
<p>1 addressed. If it's different from the RCTs. But if  2 you're going to challenge what's reported on RCTs,  3 then you need to come up with a similar number of  4 patients and you need to have some statistical  5 validity to it.  6 Q. (By Mr. De La Cerda) Okay. Moving on to  7 a new issue and this one involves TVT and TVT-O.  8 What does cytotoxicity mean?  9 A. It means in the -- in experiment, the number  10 of cells that are not viable after exposure to an  11 agent is lower than the expected of the benchmark we  12 established.  13 Q. The definition you gave me, which, by the  14 way, is very accurate in a certain sense. It's funny,  15 so you told me exactly what the scientific definition  16 is. The other thing I was asking -- that I was  17 thinking in my mind is cytotoxicity, what does that  18 word mean, literally?  19 MR. SNELL: Form.  20 A. It means it will -- it means toxicity to the  21 cell.  22 Q. (By Mr. De La Cerda) Right. And you're  23 aware that the cytotoxicity assessment of the  24 Ulmsten Prolene polypropylene sling, using the ISO</p>	<p>1 A. It was in one plate. It was not  2 scientifically significant to it. When normal  3 polypropylene was -- was examined on L929 mouse  4 fibroblast cells, there was no cytotoxicity.  5 Q. Have you studied what happens to tissues  6 when it's exposed to a cytotoxic substance?  7 A. Yes, I have.  8 Q. And can you explain what those studies were?  9 A. Before going to OB/GYN, I did a fellowship  10 on molecular pharmacology, and I did a flow cytometry  11 and cytotoxicity assays, that's what I did every day.  12 Q. Okay.  13 A. And we use different agents. So there's --  14 one thing that we know that tissue configures a  15 protection different from cells. Tissue makes --  16 makes the viability of cells coming -- mediating by  17 whatever response that you may have to a cytotoxic  18 agent.  19 So far, and there has not been any evidence  20 that polypropylene is a cytotoxic in the muscle that  21 been by biopsy or by any other -- other test.  22 Q. Would you agree that necrotized tissue  23 surrounding mesh could lead to erosion or exposure of  24 the mesh?</p>

46 (Pages 178 to 181)

Jaime Sepulveda, M.D.

Page 182	Page 184
<p>1 A. If you see a necrotic tissue in an incision, 2 it's a wound dehiscence. 3 Q. So do you agree or disagree with that 4 statement -- or that question? 5 MR. SNELL: Form. 6 A. That -- you will have to repeat it. I'm 7 sorry. 8 Q. (By Mr. De La Cerda) Would you agree that 9 necrotized tissue surrounding the mesh could lead to 10 an erosion or exposure of the mesh? 11 A. If it's at the wound, yes, it can lead to 12 that. 13 Q. Should the cytotoxicity assessment of the 14 Ulmsten polypropylene sling showing cytotoxicity be 15 included in the TVT or TVT-O IFUs? 16 MR. SNELL: Form, misstates. 17 A. Once you have a pyrogenicity assays and once 18 you have a drug elution and agarose test, if your 19 testing is negative, you just submit it to the FDA. 20 It doesn't have to be included as cytotoxic because it 21 will be -- it will be inaccurate. 22 Q. (By Mr. De La Cerda) So the answer is no; 23 right? 24 A. No.</p>	<p>1 in terms of grams per square millimeters. 2 Q. And so do you have an understanding of what 3 the significance in terms of risks and 4 complications -- 5 A. I -- I misspoke. 6 Q. Okay. 7 A. I misspoke. It's not per square millimeter. 8 It is per square meter. 9 Q. Okay. 10 A. I can double-check that. 11 Q. Do you have any understanding of what the 12 significance is in terms of risks and complications 13 when you look at lightweight mesh versus heavyweight 14 mesh? 15 MR. SNELL: Form. 16 Go ahead. 17 A. The heavy -- heavyweight meshes with -- not 18 only just with the weight, but with all the other -- 19 the other factors, including fiber size, pore -- pore 20 diameter, and method of coming together, either being 21 knitted or woven, had to do with the tolerability and 22 biocompatibility of the implant. 23 Q. (By Mr. De La Cerda) So let's get back to 24 my question, though. Is there a difference in terms</p>
Page 183	Page 185
<p>1 Q. And what would be your basis for that 2 opinion? 3 A. My -- the review of the -- the review of the 4 cytotoxicity assays that were made available to me 5 through company documents. 6 Q. Okay. And which ones were those? 7 A. The ones on TVT. 8 Q. And those included the ISO agarose diffusion 9 method? 10 A. That includes -- there are two types of 11 tests that were done. There was the agarose, the drug 12 elution, and pyrogenicity and to check for the 13 inflammatory reaction also of injected polypropylene. 14 Q. Any other bases for this opinion? 15 A. This is -- this is the basis for the 16 opinions. 17 Q. Do you know what the significance is of mesh 18 being heavyweight as opposed to lightweight? 19 A. There's -- there's -- the difference -- 20 difference in weight -- in the weight, essentially. 21 Q. And it's really a description of density, 22 right, not actual mass? 23 A. It has -- it has to do with how much per a 24 square -- square millimeter is, how much does it weigh</p>	<p>1 of risks and complications for a patient between 2 lightweight and heavyweight mesh? 3 MR. SNELL: Form. 4 A. Not to the point that has been clinically 5 demonstrated. 6 In theory, we could -- in theory, there is a 7 difference. In the lab, when we use large portions we 8 can infer that, but that has not been shown in the 9 clinical arena of incontinence. 10 Q. (By Mr. De La Cerda) Okay. So now -- 11 okay. 12 First of all, let's discuss, what is the 13 theory of the difference -- the theory of the 14 significance as to risks and complications when you 15 compare lightweight versus heavyweight mesh? 16 A. It's the biomechanical behavior is 17 different. The biomechanical behavior is different 18 not only for that type of preparation, but it's also 19 different for the caliber of the sutures. 20 In other words, if I use a thinner suture, 21 that being polypropylene or any other material, it 22 will -- it can behave differently. It has a tendency 23 to behave differently than a lightweight mesh or a 24 heavyweight mesh.</p>

47 (Pages 182 to 185)

Jaime Sepulveda, M.D.

Page 186	Page 188
<p>1 Q. Okay. In what ways?</p> <p>2 A. In the testing, when you stretch it, when</p> <p>3 you fold it, when you place it and have fibroblast</p> <p>4 growing along the lines of stress of the implant.</p> <p>5 Q. Okay. What about in terms of foreign body</p> <p>6 reaction, is there a difference between lightweight</p> <p>7 and heavyweight mesh?</p> <p>8 A. We used to believe that there was much more</p> <p>9 on the heavyweight meshes, much more foreign body</p> <p>10 reaction. But has been found is that that initial</p> <p>11 reaction of the acute inflammatory -- of the acute</p> <p>12 inflammatory process and eventually of the chronic</p> <p>13 inflammatory process leads to the creation of</p> <p>14 fibroblast.</p> <p>15 What biomechanically has been concluded is</p> <p>16 that that level of stress, the level of stress in</p> <p>17 these implants, the level of tension or forces that</p> <p>18 are applied to these implants, behave differently and</p> <p>19 that seems to determine how fibroblasts grow.</p> <p>20 So the heavyweight and the lightweight</p> <p>21 behave differently. There has not been a single study</p> <p>22 that shows, at a microscopic level, 80,000, 100,000</p> <p>23 samples, but we do have clinical studies that show</p> <p>24 that number of women. So in terms of the clinical</p>	<p>1 MR. SNELL: Form, foundation.</p> <p>2 Go ahead.</p> <p>3 A. I think that their conclusions are very,</p> <p>4 very hypothetical at best.</p> <p>5 Q. (By Mr. De La Cerda) Okay. Would you use</p> <p>6 standard Prolene in the correction of pelvic organ</p> <p>7 prolapse?</p> <p>8 A. We did. Actually, we didn't just use</p> <p>9 Prolene, we use Mersilene. We used Marlex. We used a</p> <p>10 variety of materials before this, before we actually</p> <p>11 use it for slings.</p> <p>12 We didn't use it for slings because by the</p> <p>13 time that midurethral slings came in, we have that</p> <p>14 200-micron -- actually 196-micron fiber with a pore</p> <p>15 size of 1500, and it was -- it was something -- it was</p> <p>16 something that we knew that would match the thinnest</p> <p>17 sutures that we could use for a Burch.</p> <p>18 Q. To be sure I've got an answer to that</p> <p>19 particular question, though, the answer is yes, you</p> <p>20 would use standard Prolene mesh in the surgical</p> <p>21 correction of pelvic organ prolapse; is that right?</p> <p>22 A. Yes.</p> <p>23 Q. Okay.</p> <p>24 A. I could consider using it. There are other</p>
Page 187	Page 189
<p>1 behavior, it's probably less difference than what we</p> <p>2 could see microscopically. In terms of the acute</p> <p>3 inflammatory reaction, the difference between</p> <p>4 200-micron of fiber and a 300-micron fiber is probably</p> <p>5 not that much.</p> <p>6 Q. So do you disagree with the theory that</p> <p>7 lightweight mesh is safer for patients than</p> <p>8 heavyweight mesh for use in the pelvic floor?</p> <p>9 MR. SNELL: Form.</p> <p>10 Go ahead.</p> <p>11 A. I think that's a very broad statement to say</p> <p>12 lightweight meshes for sure are safer. That is a very</p> <p>13 elementary statement that -- for much more complicated</p> <p>14 issue.</p> <p>15 Q. (By Mr. De La Cerda) Okay. Are you</p> <p>16 familiar with Closterhofen, Clinga? Are you</p> <p>17 familiar with Todd Heniford? Are you familiar with</p> <p>18 these physicians' and scientists' opinions about the</p> <p>19 safety of lightweight mesh versus heavyweight mesh?</p> <p>20 A. I am familiar with their work.</p> <p>21 Q. Okay. Do you disagree with their</p> <p>22 conclusions about lightweight mesh being safer for a</p> <p>23 patient as compared to heavyweight mesh?</p> <p>24 A. I think that their --</p>	<p>1 factors that may not lead me to use it, but the weight</p> <p>2 of the mesh is not the only factor.</p> <p>3 Q. So you would disagree with anyone that would</p> <p>4 say that using Prolene mesh in the treatment of pelvic</p> <p>5 organ prolapse is too dangerous and risky. You</p> <p>6 disagree with that; right?</p> <p>7 A. I would disagree with that, yes.</p> <p>8 Q. Have you ever read the deposition of Jorge</p> <p>9 Holste?</p> <p>10 A. I may have read it and if I did, I probably</p> <p>11 read it over a year ago.</p> <p>12 Q. Head of the preclinical department of</p> <p>13 Ethicon for 30 years, german guy, he opined that</p> <p>14 Prolene mesh is heavyweight mesh.</p> <p>15 Does that ring any bells?</p> <p>16 MR. SNELL: Foundation on that one.</p> <p>17 A. Prolene mesh, the way they classify is</p> <p>18 heavy -- heavyweight mesh. There were a number of</p> <p>19 materials that I'm aware that they work with and they</p> <p>20 classify according to weight. From the engineering</p> <p>21 point of view, that might be accurate. From a</p> <p>22 surgical point of view, there are a lot of other</p> <p>23 factors that have to be considered.</p> <p>24 Q. (By Mr. De La Cerda) Okay. Do you agree</p>

48 (Pages 186 to 189)

Jaime Sepulveda, M.D.

Page 190	Page 192
<p>1 or disagree that heavyweight mesh causes greater 2 foreign body reaction than lightweight mesh? 3 MR. SNELL: Form. 4 A. There might have -- there could be in 5 existence something that says that increases the 6 number of neutrophils, but I have not found any -- any 7 utility on clinical care on predicting the behavior of 8 TVT. 9 Q. (By Mr. De La Cerda) So do you agree or 10 disagree with that statement? 11 A. I -- I could not agree or disagree with 12 that. That's so general and I would be speculating on 13 it. 14 Q. Okay. Do you agree or disagree that leaving 15 less mesh material in the patient's body is important 16 because it will reduce the amount of inflammation and 17 foreign body reaction? 18 A. That's -- 19 MR. SNELL: Hold on. You have to give me a 20 chance to object. 21 Overbroad and incomplete hypothetical. 22 A. That's more than a scientific approach. 23 That's a very attractive approach. And that's -- as 24 surgeons, we don't always base what we do on -- on</p>	<p>1 simplistic way of looking at it because a scar does 2 not have the same viscoelastic capabilities of tissue. 3 So you have to -- when you say a scar, it's not 4 necessarily a scar in the way that we see scars. It's 5 viscoelastically it's different. 6 That's why someone can urinate after they 7 have a sling placed and they don't have retention. 8 That's how someone can have normal flows, someone can 9 be continent, at the same time also can go and 10 urinate. 11 Q. Are you familiar with the term "fibrotic 12 bridging"? 13 A. I've heard the term "fibrotic bridging," 14 yes. 15 Q. What's your understanding of that term? 16 A. It's the growth of a fibroblast from one 17 segment to the next. 18 Q. Do you agree or disagree that heavyweight 19 meshes induce more fibrotic bridging tissue reaction 20 causing more shrinkage during maturing of the 21 collagenous tissue? 22 MR. SNELL: Form, foundation. 23 A. I saw it described at one time. I didn't 24 see anything that could conclude it. I did not see a</p>
Page 191	Page 193
<p>1 science, but also on common sense backed by science. 2 And, yeah, if I can take care of something 3 with less mesh, I probably would be attracted to it. 4 On the other side, you need to respect as surgeons 5 that say, "Well, you know, I will use the full-length 6 sling because it has the longest evidence behind it." 7 So in that regard, you're using more material, but you 8 have more evidence behind it. 9 Q. (By Mr. De La Cerda) Do you agree or 10 disagree that reducing the inflammatory reaction of 11 the body will also reduce the risk of contraction or 12 shrinkage of the mesh? 13 MR. SNELL: Same objection. 14 A. We don't -- we don't know that and I could 15 not agree with something that, in general, as a 16 specialty, we don't -- we don't know. 17 The reduced inflammatory reaction may not 18 work for the best. There's a chain of events that 19 happens during the inflammatory process and that leads 20 ultimately to the creation of a fibroblast angle that 21 is what gives the support beyond the implant. 22 Q. (By Mr. De La Cerda) It's scarring; 23 right? 24 A. It is -- it is not a scar. Scar is the most</p>	<p>1 paper that could conclude it. I'm welcome to look at 2 anything that says that fibrotic bridging is 3 significantly more. The first thing I would like to 4 know is how you're going to measure it. 5 Q. (By Mr. De La Cerda) Okay. So I guess 6 you don't have enough information to either agree or 7 disagree; is that right? 8 MR. SNELL: Object, misstates. 9 A. I have -- I have enough information to -- to 10 not agree or disagree with it. And that -- the 11 information that I have is that from one segment to 12 the other, just looking at two segments and the 13 fibroblast that grow between, at one point in time 14 that's not enough to make that conclusion, that 15 fibrotic bridging would cause contraction or 16 anything -- or anything similar like that. 17 There's -- in one of the papers that I gave, 18 there are two papers that I submitted today about the 19 effect of stress on fibroblast growth, and I think 20 that's more complete than fibrotic bridging. 21 Q. (By Mr. De La Cerda) So is it fair to say 22 that you disagree with that statement then? 23 A. I -- I cannot say one way or the other 24 fibrotic bridging. If I would have to commit to</p>

Jaime Sepulveda, M.D.

Page 194	Page 196
<p>1 agreeing or disagreeing with it, I think that fibrotic</p> <p>2 bridging is, again, very hypothetical -- hypothetical</p> <p>3 statement. I also believe that I can change my</p> <p>4 opinion based on what I read.</p> <p>5 Q. Okay. So as you sit here today, though, I</p> <p>6 think -- I think what you're saying, as you sit here</p> <p>7 today, is you would have to disagree because you</p> <p>8 believe there's not enough evidence to support the</p> <p>9 statement? I mean, is that what you're saying?</p> <p>10 A. There's not enough evidence to support</p> <p>11 fibrotic bridging. It's a concept that is</p> <p>12 interesting. It's a concept that can be studied.</p> <p>13 It's a concept that has to be taken into the context</p> <p>14 of what -- how fibroblast grow under stress.</p> <p>15 Q. Are you aware that Ethicon's own scientists</p> <p>16 and consultants have opined that Prolene mesh, the</p> <p>17 same mesh in the TVT and TVT-O, is heavyweight as</p> <p>18 opposed to being lightweight?</p> <p>19 MR. SNELL: Lacks foundation.</p> <p>20 A. I -- I -- I haven't seen the opinion of each</p> <p>21 one of them.</p> <p>22 Q. (By Mr. De La Cerda) Okay. So you're not</p> <p>23 aware?</p> <p>24 A. I'm not aware.</p>	<p>1 What would be your basis for not having to</p> <p>2 include it in the IFU?</p> <p>3 A. Number one, it's not evidence -- the concept</p> <p>4 of whatever implications they may have clinically is</p> <p>5 not evidence-based and, number two, there are no</p> <p>6 clinical implications that you can attribute to it.</p> <p>7 Q. Okay. Part of your report discusses the</p> <p>8 MSDS. So you've reviewed the MSDS for the raw</p> <p>9 polypropylene that goes into making the Prolene and</p> <p>10 the TVT, TVT-O, Gynemesh, Prolift and Prosima?</p> <p>11 A. I saw the MSDS about raw -- raw material.</p> <p>12 Q. Right. You're familiar with what a Material</p> <p>13 Safety Data Sheet is?</p> <p>14 A. I learned about Material Safety Data Sheet</p> <p>15 along the lines of this -- of this litigation.</p> <p>16 Q. Okay. So you know that the Material Safety</p> <p>17 Data Sheet states that raw polypropylene is</p> <p>18 incompatible with strong oxidizers, such as peroxides;</p> <p>19 correct?</p> <p>20 A. I read that in the MSDS.</p> <p>21 Q. And as a physician, you know that peroxides</p> <p>22 are present in the human body; right?</p> <p>23 MR. SNELL: Form.</p> <p>24 A. I am not aware of anyone measuring the</p>
Page 195	Page 197
<p>1 Q. Should a discussion of whether Prolene mesh</p> <p>2 is heavyweight be included in the IFUs for the TVT and</p> <p>3 the TVT-O?</p> <p>4 MR. SNELL: Form, foundation.</p> <p>5 A. No, I don't think that -- I actually believe</p> <p>6 that most doctors, if you tell them heavyweight --</p> <p>7 about heavyweight and lightweight meshes, they have</p> <p>8 had to be educated on it.</p> <p>9 I know that the great majority of them are</p> <p>10 probably going to look at me and say, "Okay, Jaime, so</p> <p>11 you're telling me about heavyweight and lightweight</p> <p>12 and all these different aspects, tell me how does this</p> <p>13 translate in the care of my patients?" And I would</p> <p>14 disagree with -- with any statement that makes</p> <p>15 anything firm about heavyweights or lightweights</p> <p>16 because the fact is that the model to a study have not</p> <p>17 been found.</p> <p>18 Q. (By Mr. De La Cerda) Okay. And so your</p> <p>19 opinion is that it doesn't need to be included in</p> <p>20 the IFU; right?</p> <p>21 A. No, I don't think that has any -- any place</p> <p>22 in the IFU.</p> <p>23 Q. And your basis for that is what? I don't</p> <p>24 want to put words in your mouth.</p>	<p>1 levels of peroxide.</p> <p>2 Q. (By Mr. De La Cerda) Well, as a physician</p> <p>3 you know that the human body produces hydrogen</p> <p>4 peroxide as part of the inflammatory process; right?</p> <p>5 A. I just have not seen a quantitative assay of</p> <p>6 it.</p> <p>7 Q. Okay. So you know it happens, you just</p> <p>8 don't know what quantitatively it amounts to; right?</p> <p>9 A. I'm not aware of any quantitative study.</p> <p>10 Q. And the implantation of the TVT, TVT-O,</p> <p>11 Gynemesh, Prolift and Prosima causes an inflammatory</p> <p>12 process; correct?</p> <p>13 A. The inflammatory process being defined as a</p> <p>14 cellular process.</p> <p>15 Q. Should the fact that raw polypropylene that</p> <p>16 goes into making the Prolene, the TVT, the TVT-O,</p> <p>17 Gynemesh, Prolift and Prosima is incompatible with</p> <p>18 peroxides according to the MSDS, should that</p> <p>19 information be included in the IFU?</p> <p>20 MR. SNELL: Form.</p> <p>21 A. No, it should not be included and based --</p> <p>22 no, it shouldn't be included.</p> <p>23 Q. (By Mr. De La Cerda) You already know my</p> <p>24 next question.</p>

50 (Pages 194 to 197)



Jaime Sepulveda, M.D.

Page 198	Page 200
<p>1 What's the basis for not including that</p> <p>2 information?</p> <p>3 A. No raw material is being asserted on humans.</p> <p>4 Q. Okay. Anything else?</p> <p>5 A. No.</p> <p>6 Q. Okay. You're also -- you addressed this in</p> <p>7 your report. You're also aware that the MSDS states:</p> <p>8 "Polypropylene has been tested in laboratory rats by</p> <p>9 subcutaneous implantation of disks or powder, local</p> <p>10 sarcomas were induced at the site of implantation."</p> <p>11 Do you recall that verbiage that's from the</p> <p>12 MSDS?</p> <p>13 A. From the MSDS.</p> <p>14 Q. What does -- what does that verbiage mean?</p> <p>15 A. It's a disk, it's a disk of basically raw</p> <p>16 polypropylene. And the way I see it is there are two</p> <p>17 factors to it. Number one, the size and the volume of</p> <p>18 the polypropylene that's being inserted, in addition</p> <p>19 to the nature of this polypropylene. I cannot speak</p> <p>20 about this being even remotely similar to what we use</p> <p>21 on -- on TVT-O and what we use in Prolene sutures</p> <p>22 because there is not -- there has been no</p> <p>23 chromatography, no crystallinity assays, no</p> <p>24 temperature assays on any of this disk. So I don't</p>	<p>1 second.</p> <p>2 You're aware of no test performed by Ethicon</p> <p>3 to determine whether the surface cracking or</p> <p>4 degradation, or whatever you want to call it, that's</p> <p>5 been -- that is seen under -- under microscope of the</p> <p>6 mesh, whether it's biofilm or whatever you believe it</p> <p>7 is, you've never seen a test by Ethicon to determine</p> <p>8 whether that particular characteristic is clinically</p> <p>9 significant to patients; right?</p> <p>10 A. No, there are only three reports that I'm --</p> <p>11 that I'm aware of.</p> <p>12 Q. Okay. And you're aware of no test by</p> <p>13 Ethicon to determine whether the weight of Prolene</p> <p>14 mesh causes more complications in patients in</p> <p>15 comparison to lightweight mesh; correct?</p> <p>16 MR. SNELL: Form, foundation.</p> <p>17 A. There's no -- no basis to generate that --</p> <p>18 that study.</p> <p>19 Q. (By Mr. De La Cerda) What do you mean by</p> <p>20 that?</p> <p>21 A. No one has come out with the actual question</p> <p>22 in terms -- in the question on the hypothesis of it or</p> <p>23 the theory of it.</p> <p>24 Q. Okay.</p>
Page 199	Page 201
<p>1 have that information available.</p> <p>2 That being said, you can also consider --</p> <p>3 you should also consider the host in which most of the</p> <p>4 time is Wistar rats, Wistar rats or Himalayan rabbits.</p> <p>5 I had the opportunity to work with Wistar rats. They</p> <p>6 have a very, very peculiar immune system.</p> <p>7 Q. When there is an indication that a substance</p> <p>8 can cause cancer in animals, like rats, what does that</p> <p>9 possibly indicate for humans?</p> <p>10 MR. SNELL: Form, speculation.</p> <p>11 A. It has very, very little implications unless</p> <p>12 you are consistently prove that these causes -- causes</p> <p>13 cancer.</p> <p>14 Now, this is -- these are -- it's very</p> <p>15 important to define that these are two different</p> <p>16 materials. The raw preparations are different from</p> <p>17 the preparations used in -- in sutures. They're two</p> <p>18 different things.</p> <p>19 Q. (By Mr. De La Cerda) Chronic inflammation</p> <p>20 has been linked to cancer; hasn't it?</p> <p>21 A. That's -- that's not even a theory. That's</p> <p>22 a hypothesis, actually.</p> <p>23 Q. Okay. If mesh -- strike that.</p> <p>24 Ethicon -- I need to go back for just a</p>	<p>1 A. In other words, just because we think that</p> <p>2 there's a scientific study that we can do doesn't mean</p> <p>3 that that needs to be done.</p> <p>4 Q. Okay. But Ethicon -- Ethicon, itself,</p> <p>5 hasn't performed that study; right?</p> <p>6 A. I -- I am -- I am not familiar with the</p> <p>7 specific studies that they have performed on that</p> <p>8 specific area.</p> <p>9 Q. You're aware of no study performed by</p> <p>10 Ethicon to determine whether polypropylene could be</p> <p>11 linked to cancer; right?</p> <p>12 A. I -- I am not familiar of that, but I know</p> <p>13 about the dog study that -- in which they -- sutures</p> <p>14 were evaluated at about eight years and there was</p> <p>15 no -- no reported cancer that I'm aware of.</p> <p>16 Q. Okay. You brought one study with you here.</p> <p>17 I think it was a case report of cancer and</p> <p>18 polypropylene. What was it? You mentioned it briefly</p> <p>19 when we were looking through your materials.</p> <p>20 A. It is -- the first case reported of a clear</p> <p>21 cell carcinoma in the surrounding area to the -- to</p> <p>22 the incision for the midurethral sling.</p> <p>23 I also brought the response from two experts</p> <p>24 to that specific case report.</p>

51 (Pages 198 to 201)

Jaime Sepulveda, M.D.

Page 202	Page 204
<p>1 Q. What did that study -- did that study have</p> <p>2 some sort of conclusion about what might be causing</p> <p>3 that clear cell carcinoma?</p> <p>4 A. No, it does not have a conclusion. There's</p> <p>5 a hypothesis and that's as far as they can get about a</p> <p>6 hypothesis about inflammation, I believe.</p> <p>7 Q. And so that's one discussion of inflammatory</p> <p>8 process being at least hypothesized as being</p> <p>9 responsible for this particular cancer; right?</p> <p>10 A. Yeah, unfort- -- I don't want to say</p> <p>11 unfortunately, it's not unfortunate. It's -- this is</p> <p>12 not an actual study. This is a case report.</p> <p>13 Q. Case report.</p> <p>14 A. One case report. And as we have gone</p> <p>15 through so many times today, the overwhelming data --</p> <p>16 there are papers that -- there are articles that</p> <p>17 describe the continued use of polypropylene in</p> <p>18 midurethral sling with the incidence of cancer in that</p> <p>19 population or the frequency of cancer in that</p> <p>20 population being actually zero.</p> <p>21 Q. Okay. So then the question about your</p> <p>22 opinion, should this warning that's included in the</p> <p>23 MSDS -- or this verbiage that's included in the MSDS</p> <p>24 regarding the subcutaneous implant of disk or powder</p>	<p>1 A. I -- I -- I'll have to read that. If you</p> <p>2 can be blinded to your study, that would be optimal,</p> <p>3 but that's not possible in every -- in every design.</p> <p>4 Q. So are you saying that a scientist in a</p> <p>5 re- -- scientist and a physician -- it's okay for</p> <p>6 that -- strike that.</p> <p>7 It's okay for a scientist and a physician to</p> <p>8 go into a research study with the desire to achieve a</p> <p>9 specific result?</p> <p>10 A. No, I think that the design of the study</p> <p>11 would actually protect the study from any desire that</p> <p>12 anyone could have.</p> <p>13 Q. So should or should not the scientist and</p> <p>14 the physician go into a study with the desire to</p> <p>15 achieve a specific result?</p> <p>16 MR. SNELL: Form, overbroad.</p> <p>17 A. I don't -- I don't believe that anyone</p> <p>18 should go into any study hoping or wishing for a</p> <p>19 specific result. That's not what the methodology of a</p> <p>20 science is for.</p> <p>21 Q. (By Mr. De La Cerda) You agree that a</p> <p>22 scientist and a physician should not design a</p> <p>23 research project for medical publication with the</p> <p>24 specific purpose of a single result; correct?</p>
Page 203	Page 205
<p>1 where local carcinomas were induced at the site of</p> <p>2 implantation, should that information be included in</p> <p>3 the IFUs for the TVT, the TVT-O, Gynemesh, Prolift and</p> <p>4 Prosima?</p> <p>5 A. The answer is no, and the basis of that is</p> <p>6 that is not relevant to the product that is being</p> <p>7 implanted.</p> <p>8 Q. Has -- are you aware of any studies that</p> <p>9 Ethicon's done comparing the raw polypropylene with</p> <p>10 the manufactured version that is actually implanted in</p> <p>11 humans, any test of any kind?</p> <p>12 A. Raw -- raw polypropylene is not used in</p> <p>13 humans. Raw polypropylene is actually not even used</p> <p>14 on containers. It has very -- it doesn't have an</p> <p>15 actual use. It's raw material.</p> <p>16 Q. And so you're aware of no studies, though,</p> <p>17 where Ethicon's tested raw polypropylene versus the</p> <p>18 finished manufactured product of any type; right?</p> <p>19 A. No, I'm not familiar with any studies using</p> <p>20 raw polypropylene.</p> <p>21 Q. Okay. Shifting gears a little bit.</p> <p>22 You agree that as a scien- -- a scientist or</p> <p>23 a physician should not go into a research study with a</p> <p>24 desire to achieve a specific result; correct?</p>	<p>1 MR. SNELL: Form.</p> <p>2 A. It's -- there's no science if you are trying</p> <p>3 to get it or achieve a specific result.</p> <p>4 Q. (By Mr. De La Cerda) You can't go into a</p> <p>5 medical scientific research trying to answer a</p> <p>6 question with any preconceived biases; right?</p> <p>7 MR. SNELL: Form, overbroad.</p> <p>8 A. There's -- we -- we have seen that there --</p> <p>9 there's some preconceived biases, but they become</p> <p>10 clearly evident.</p> <p>11 Q. (By Mr. De La Cerda) But you shouldn't go</p> <p>12 in with any preconceived biases, that's what you</p> <p>13 shouldn't do; right?</p> <p>14 A. You don't -- you don't do that as a</p> <p>15 scientist.</p> <p>16 Q. Right. Do you agree it's not ethical for</p> <p>17 researchers performing clinical trials to be paid if</p> <p>18 and only if the clinical trials have certain results?</p> <p>19 MR. SNELL: Form, overbroad.</p> <p>20 Go ahead.</p> <p>21 A. I have no basis to judge anyone that has</p> <p>22 good science, good knowledge, and to be compensated</p> <p>23 for it.</p> <p>24 Q. (By Mr. De La Cerda) No, and I -- well,</p>

52 (Pages 202 to 205)

Jaime Sepulveda, M.D.

Page 206	Page 208
<p>1 that's excellent, but my question is a little 2 different. 3 What I'm saying is whether you believe it's 4 ethical for researchers performing clinical trials to 5 be paid if and only if they produce a study with 6 specific results. 7 MR. SNELL: Same objection. 8 Q. (By Mr. De La Cerda) So not the fact 9 they're being paid, just the fact they only get paid 10 if you give me these results? 11 A. Well, it's -- you're going -- if I'm going 12 to acquire a product from you, and I'm going to make 13 an investment on that product, I'm going to pay you 14 based on what you show me with your -- with your 15 product. 16 Now, you can -- you can actually do that. 17 You can sell me a product that may not perform as I 18 expect, but if I try that product and I see that 19 consistently works in ways that are the same or better 20 as you present it, you can go back and say that was 21 not an issue there. 22 Q. Okay. So you can go back in time and say it 23 was okay, it wasn't unethical to do that? 24 A. It's -- you can go back in time and say it's</p>	<p>1 Q. And you've seen the Ulmsten and Nilsson 2 studies that Ethicon touts as long-term support for 3 their TVT line of slings; right? 4 MR. SNELL: Form. 5 A. They also wasn't just the inventor of the 6 TVT. At that time he brought the most innovative kind 7 of approach to incontinence. I mean, we -- we were -- 8 until that time, we were doing continence procedures 9 in the urethrovesical junction, we were using sutures, 10 we were placing things under tension, we were using 11 absorbable materials that didn't work long term, 12 materials that were not pliable and they came up and 13 changed the way we were thinking about continence 14 care. Continence care became different because of 15 Ulmsten and Petros. 16 Q. (By Mr. De La Cerda) Getting back to the 17 question. You've seen the studies that Ethicon 18 touts as support for their TVT line of slings; 19 right? You've seen those, the Ulmsten/Nilsson 20 studies; right? 21 MR. SNELL: Form. 22 Go ahead. 23 A. I've seen the Ulmsten studies, I've seen 24 Nilsson, I've seen Falconer, I've seen Petros.</p>
Page 207	Page 209
<p>1 not a matter of ethical or not ethical. I know that 2 there was a truth -- a truthful interaction and that 3 what this physician or anyone in that calculating 4 innovation shows me was -- was real, was actually 5 accurate. 6 Q. Okay. You mean that you can at least agree 7 that that has a potential to create bias, doesn't it, 8 in the study? 9 A. I -- but you can -- you cannot put that on 10 the person that is trying to bring it in. There has 11 to be a level of -- of understanding and backtracking. 12 In other words, if you -- and I'm going to 13 allow myself to place an example. If you try to sell 14 me a medical device, I will have a hard time buying it 15 from you. But when -- if you try to sell me a legal 16 product, I might be more attracted to buy from you and 17 I might believe that you may deliver that legal 18 product. 19 That has nothing to do with science. I 20 deviated into what -- just to illustrate a point just 21 to answer your question. 22 Q. You're aware, of course, that Ulmsten was 23 the inventor of original TVT; right? 24 A. Yes.</p>	<p>1 Q. (By Mr. De La Cerda) You've seen it in 2 the marketing materials for Ethicon that they 3 frequently site to those studies as being support 4 for the use of their slings; right? 5 A. For that -- for that specific use, yes. 6 Q. And you've relied on these studies to 7 support your practice of using the TVT line of 8 products; right? 9 A. I rely on that and I rely more than that on 10 large studies. And the fact is that it has been 11 reproduced over and over again. 12 Q. Did Ethicon ever inform you that Professor 13 Ulmsten's company, MedScan, the company that owned the 14 rights to the TVT, was promised \$400,000 if and only 15 if it produced a study with the TVT showing certain 16 results? 17 MR. SNELL: Form. 18 A. There's my interaction with -- or any 19 surgeon's interaction for that sake at that time, 20 would never get into that. 21 Q. (By Mr. De La Cerda) So you haven't heard 22 that? 23 A. No, I -- I saw -- I saw that as one of the 24 claims, through all these documents, but really</p>

Jaime Sepulveda, M.D.

Page 210	Page 212
<p>1 didn't -- didn't matter much to me.</p> <p>2 Q. Okay. So that particular fact doesn't</p> <p>3 matter to you?</p> <p>4 A. No.</p> <p>5 Q. Okay. Shifting gears a little bit. Should</p> <p>6 a medical device company put profits above patient</p> <p>7 safety?</p> <p>8 MR. SNELL: Form, speculation.</p> <p>9 THE COURT REPORTER: I'm sorry, form --</p> <p>10 MR. SNELL: Form, speculation. Put</p> <p>11 overbroad in there, too.</p> <p>12 A. Safety and results bring you profits.</p> <p>13 Q. (By Mr. De La Cerda) So is the answer no?</p> <p>14 A. No.</p> <p>15 Q. Should a medical device company rush a</p> <p>16 product to market with the primary purpose being to</p> <p>17 defend its market share?</p> <p>18 A. There's -- when you have a good product and</p> <p>19 you have enough market share, yeah, you want to make</p> <p>20 sure that you keep it and you keep it with quality.</p> <p>21 Q. So the answer is yes to that one?</p> <p>22 MR. SNELL: Form.</p> <p>23 A. On that one -- on that regard, on the</p> <p>24 general form of that question, yes.</p>	<p>1 submitted. I cannot recall it right now. I can go</p> <p>2 back and check what was submitted, but I'm not</p> <p>3 familiar with it.</p> <p>4 Q. If he had performed a study, do you believe</p> <p>5 that that study should have been submitted along with</p> <p>6 the information about the TVT-O to the FDA?</p> <p>7 MR. SNELL: Form, calls for regulatory</p> <p>8 opinion, outside the regulatory scope.</p> <p>9 A. I think it goes to whatever -- whatever the</p> <p>10 FDA feels that it requires from the company or</p> <p>11 whatever the company fulfills in its obligations to</p> <p>12 the FDA.</p> <p>13 Q. (By Mr. De La Cerda) How about you as a</p> <p>14 physician, before you're going to use a product,</p> <p>15 would you want to know all the clinical studies that</p> <p>16 are out there about that product before you start</p> <p>17 implanting it?</p> <p>18 A. I actually gave -- I have given testimony</p> <p>19 today that I trust that the FDA is going to do what's</p> <p>20 best in that regard.</p> <p>21 Q. Do you have any understanding of what the</p> <p>22 clearance process involves, 510(k) clearance?</p> <p>23 A. Yes. I do have an understanding of it.</p> <p>24 Q. Do you know whether the FDA requires</p>
Page 211	Page 213
<p>1 Q. (By Mr. De La Cerda) What clinical</p> <p>2 studies were done of the TVT-O before it was</p> <p>3 released onto the market?</p> <p>4 A. There was -- there were a variety of</p> <p>5 studies. There was the Mulberry study --</p> <p>6 THE COURT REPORTER: The --</p> <p>7 THE WITNESS: The Mulberry.</p> <p>8 A. -- and there was -- there were cadaver</p> <p>9 studies, and there were studies on outside-in</p> <p>10 transobturators slings.</p> <p>11 Q. Was one of the studies by de Leval?</p> <p>12 A. By Delorme first and then de Leval.</p> <p>13 Q. Delorme was outside-in; right?</p> <p>14 A. Right.</p> <p>15 Q. And then de Leval was inside-out?</p> <p>16 A. Right.</p> <p>17 Q. De Leval is considered the inventor of the</p> <p>18 TVT-O; is that right?</p> <p>19 A. Yes.</p> <p>20 Q. And do you know whether the results of</p> <p>21 de Leval's clinical studies were included in the</p> <p>22 application for clearance submitted to the FDA for the</p> <p>23 TVT-O?</p> <p>24 A. I'm not familiar with what was exactly</p>	<p>1 clinical studies before a product is 510(k) cleared?</p> <p>2 A. I think that they have made -- I don't</p> <p>3 think, I'm aware that they have made a decision to put</p> <p>4 in place a mechanism that works exactly with a 510(k).</p> <p>5 Now, am I someone to criticize or favor --</p> <p>6 or favor that? I probably could sit in my big chair</p> <p>7 and decide that, but the reality is that there's</p> <p>8 people with expertise in regulatory affairs at the FDA</p> <p>9 and people with expertise on regulatory affairs at</p> <p>10 Ethicon, and they're the ones that need to come</p> <p>11 together on that.</p> <p>12 Q. I guess the issue that I'm really asking</p> <p>13 about is what you want to know as a doctor. Before</p> <p>14 you ever implant a product, do you want to know that</p> <p>15 if there are clinical studies on that product before</p> <p>16 you've implanted it, do you want to know what those</p> <p>17 clinical -- what the findings were of those clinical</p> <p>18 studies before you implant the product?</p> <p>19 A. I'm aware of clinical products and design.</p> <p>20 I'm aware of these studies, but you can present all</p> <p>21 these studies and one final part is going to be what</p> <p>22 the FDA regulatory process comes -- comes and tells</p> <p>23 me.</p> <p>24 Q. What I'm saying, though, is you, as an</p>

Jaime Sepulveda, M.D.

Page 214	Page 216
<p>1 implanting physician, okay, a product is presented to</p> <p>2 you by a medical device company and there are clinical</p> <p>3 studies out there that are about this particular</p> <p>4 product. You're going to want to know all the</p> <p>5 clinical studies that are out there about that product</p> <p>6 before you implant it; right?</p> <p>7 MR. SNELL: Form, asked and answered.</p> <p>8 Go ahead.</p> <p>9 A. I want to know -- I want to know the studies</p> <p>10 and I want to know -- obviously, I want to know more</p> <p>11 than just the studies. I want to know the</p> <p>12 biomechanics of it, I want to know all these things.</p> <p>13 But that's -- ultimately, it comes down to that</p> <p>14 process between the -- between Ethicon and the FDA.</p> <p>15 Q. (By Mr. De La Cerda) Okay.</p> <p>16 A. And I'm going to trust the product that</p> <p>17 comes out from it.</p> <p>18 Q. Okay. Let's shift gears a little bit.</p> <p>19 You're aware that the IFUs for the Gynemesh,</p> <p>20 Prolift and Prosima state: "The mesh remains soft and</p> <p>21 pliable and normal wound healing is not noticeably</p> <p>22 impaired"; right?</p> <p>23 MR. SNELL: Foundation on that.</p> <p>24 Do you have that IFU? I'm not sure if you</p>	<p>1 enzymes."</p> <p>2 Q. (By Mr. De La Cerda) So that statement is</p> <p>3 included, of course, in the Gynemesh IFU and the</p> <p>4 Prolift and Prosima IFUs, which also use Gynemesh;</p> <p>5 right?</p> <p>6 A. Yes.</p> <p>7 Q. Now, you're aware that Gynemesh PS is</p> <p>8 Prolene Soft, except for it's used in the pelvic</p> <p>9 application as opposed to hernia application; right?</p> <p>10 A. It's -- Pro- -- Prolene Soft, yes.</p> <p>11 Q. Are you aware that in 2001, Ethicon had in</p> <p>12 its files a conclusion that Gynemesh PS was too stiff</p> <p>13 for use in vaginal tissues?</p> <p>14 MR. SNELL: Form, foundation.</p> <p>15 A. It's -- I read something about that from</p> <p>16 some investigator, but it was -- it was an opinion</p> <p>17 about being too stiff. I think it was at the -- at</p> <p>18 the risk of -- I'm not remembering well or -- I'm not</p> <p>19 speaking accurately, may have been an investigator's</p> <p>20 opinion.</p> <p>21 Q. (By Mr. De La Cerda) Okay. Are you aware</p> <p>22 that Ethicon also had in its files a conclusion that</p> <p>23 Prolene Soft should not be pursued as a mesh used in</p> <p>24 pelvic floor repair because it was too stiff for use</p>
Page 215	Page 217
<p>1 made a correct statement across all those IFUs.</p> <p>2 Do you mind taking a break?</p> <p>3 MR. DE LA CERDA: That's fine. Let's do</p> <p>4 that.</p> <p>5 (Thereupon, a recess was taken from</p> <p>6 2:11 p.m. until 2:18 p.m., after which the</p> <p>7 following proceedings were held:)</p> <p>8 Q. (By Mr. De La Cerda) Doctor, just for the</p> <p>9 sake of showing you, this is the Gynemesh -- sorry,</p> <p>10 I didn't bring a copy of it -- so that's the</p> <p>11 Gynemesh IFU. The part that I'm referencing is at</p> <p>12 the bottom, I think it's the second-to-last</p> <p>13 sentence. It starts with "the mesh remains</p> <p>14 pliable."</p> <p>15 MR. SNELL: Soft and pliable.</p> <p>16 Why don't you ask him to read it just so the</p> <p>17 record is clear.</p> <p>18 MR. DE LA CERDA: Yeah, sure.</p> <p>19 Q. (By Mr. De La Cerda) Can you read that,</p> <p>20 Doctor?</p> <p>21 A. "The mesh remains soft and pliable and</p> <p>22 normal wound healing is not noticeably impaired. The</p> <p>23 material is not absorbed, nor is subject to</p> <p>24 degradation or weakening by the action of tissue</p>	<p>1 in vaginal tissues?</p> <p>2 MR. SNELL: Same objection.</p> <p>3 A. No, I'm not -- I'm not aware of that and</p> <p>4 that's not what was eventually done.</p> <p>5 Q. (By Mr. De La Cerda) Do you know whether</p> <p>6 scar contracture around the mesh can occur with the</p> <p>7 Gynemesh?</p> <p>8 A. There's -- there's -- there's this -- again,</p> <p>9 hypothesis that scar contraction could happen around</p> <p>10 the mesh. So to that -- to that specific issue, I ask</p> <p>11 what is the objective measurement of a scar</p> <p>12 contraction or the mesh contraction. I wanted to see</p> <p>13 where -- where's the evidence to it?</p> <p>14 Because when we repair these -- repair these</p> <p>15 patients with permanent sutures, when we place</p> <p>16 polypropylene in the uterosacral ligaments or in the</p> <p>17 sacrospinous ligament, we didn't see any contraction</p> <p>18 of those fibers. So where is the evidence? No one</p> <p>19 could ever bring me evidence of a contraction on the</p> <p>20 mesh.</p> <p>21 Q. Okay. Do you know if that -- if this scar</p> <p>22 contracture around Gynemesh was a problem that Ethicon</p> <p>23 engineers were trying to solve?</p> <p>24 A. I -- I don't even know if they try to solve</p>



Jaime Sepulveda, M.D.

Page 218	Page 220
<p>1 it because I did not see a problem with contraction.</p> <p>2 Q. Okay. So you're also not sure, though,</p> <p>3 whether Ethicon was trying to solve this problem? You</p> <p>4 probably don't believe it's a problem. That's what it</p> <p>5 sounds like you're saying, that it's not a problem,</p> <p>6 but my question is really are you aware whether</p> <p>7 Ethicon was trying to solve what it perceived to be a</p> <p>8 problem with contracture of scar tissue around</p> <p>9 Gynemesh?</p> <p>10 MR. SNELL: Foundation.</p> <p>11 A. I don't -- I don't see in which model they</p> <p>12 would try to solve it.</p> <p>13 Q. (By Mr. De La Cerda) Okay. But are you</p> <p>14 aware if they were trying to solve this or not?</p> <p>15 A. No, I'm not aware of them trying to solve</p> <p>16 contractions of any -- any type, any type of implants.</p> <p>17 Q. If scar contracture exists around Gynemesh,</p> <p>18 would that translate into complications for a patient?</p> <p>19 MR. SNELL: Form.</p> <p>20 A. More than a complication for a patient. The</p> <p>21 contraction would just tell me that I have to -- I</p> <p>22 have to make adjustments in my surgery and that brings</p> <p>23 a whole new set of variables in my -- in my surgery.</p> <p>24 Q. (By Mr. De La Cerda) Do you know whether</p>	<p>1 MR. SNELL: Actually, hold on. Objection,</p> <p>2 foundation, misstates company intent.</p> <p>3 A. I don't -- I don't think that that's what</p> <p>4 they concluded, that it was safer. I don't think that</p> <p>5 there is anyone that actually came and say, "Okay,</p> <p>6 this is safer," or, "We have more evidence to say that</p> <p>7 it's safer, but you may have to adjust it," or "It may</p> <p>8 not contract or they will contract." I don't -- I</p> <p>9 don't think it got to that point. I think that we had</p> <p>10 what we had with Gynemesh.</p> <p>11 Q. (By Mr. De La Cerda) Okay. Did you ever</p> <p>12 do a presentation on the benefits of lightweight</p> <p>13 mesh over heavyweight mesh?</p> <p>14 A. I did make presen- -- many presentations on</p> <p>15 how -- on the benefits of lightweight mesh, and that</p> <p>16 was a prevailing -- the prevailing thought at that</p> <p>17 time and I still would make a presentation and say</p> <p>18 there are some benefits on lightweight mesh. There</p> <p>19 are -- there's some benefits on having less implant,</p> <p>20 in having less mesh.</p> <p>21 The question is when we have all this -- all</p> <p>22 these different -- different things that we wish for,</p> <p>23 how much science do I have behind it? And during</p> <p>24 those -- those presentations, there's always the</p>
Page 219	Page 221
<p>1 or not physicians were asking Ethicon for a mesh</p> <p>2 which would be better than Gynemesh on the issue of</p> <p>3 scar contracture?</p> <p>4 A. I -- I believe that there was always the --</p> <p>5 the idea that we could always have innovation on the</p> <p>6 type of implants that we would have. Although</p> <p>7 Gynemesh had more evidence than any other implant.</p> <p>8 There was more evidence, there are more papers</p> <p>9 published on Gynemesh than native tissue for specific</p> <p>10 compartments. We have that. We all -- we all did</p> <p>11 have an understanding that there was going to be a</p> <p>12 progression on the innovation of the product. So if</p> <p>13 there is a course to do that, that's -- that's</p> <p>14 something that I think every physician would want to</p> <p>15 see.</p> <p>16 Q. And Ethicon did that -- they did just that,</p> <p>17 didn't they?</p> <p>18 A. They -- they actually invited me and give</p> <p>19 me -- with other doctors, tell me what -- what this --</p> <p>20 what would you like to see in -- in the next</p> <p>21 generation.</p> <p>22 Q. They innovated so well that they even</p> <p>23 developed a mesh, other than Gynemesh, that they</p> <p>24 thought was safer than Gynemesh; right?</p>	<p>1 discussion of: Is this really what we want? Do we</p> <p>2 want bigger pores? Do we want a lighter --</p> <p>3 lightweight meshes? Do we want lighter meshes?</p> <p>4 I'm not saying that it's going to be a bad</p> <p>5 thing. It's probably going to be a good thing, but I</p> <p>6 don't have the science to back it up.</p> <p>7 Q. You mentioned that you did present on some</p> <p>8 of the benefits of lightweight mesh or using less</p> <p>9 mesh. What would those benefits be?</p> <p>10 A. It's a -- the benefits is that you have less</p> <p>11 inflammatory response, you have less cellular</p> <p>12 response, you have a better layout of fibroblast and</p> <p>13 that's the hypothesis behind all this.</p> <p>14 But none of those things that we, as a</p> <p>15 group, thought as -- as physicians thought that was</p> <p>16 going to be better, wasn't necessarily going to be</p> <p>17 better. These were things that were not statements.</p> <p>18 These were things that we have it here and we have</p> <p>19 this product and it's worth looking to it and it's</p> <p>20 worth using it and, you know, if I'm going to have --</p> <p>21 use something heavier or something light, I probably</p> <p>22 go with something light because it's more innovative.</p> <p>23 Q. It's a reasonable theory to believe that the</p> <p>24 lightweight mesh is safer for a patient than the</p>

56 (Pages 218 to 221)

Jaime Sepulveda, M.D.

Page 222	Page 224
<p>1 heavyweight mesh; right?</p> <p>2 A. No. That's not --</p> <p>3 MR. SNELL: Lacks foundation.</p> <p>4 Go ahead.</p> <p>5 A. No. That's not what we can conclude with</p> <p>6 it. We're not talking -- Gynemesh proved to be safe.</p> <p>7 Gynemesh proved to be effective. This is a totally</p> <p>8 different set of considerations, scientifically it's a</p> <p>9 totally different set of considerations.</p> <p>10 Q. (By Mr. De La Cerda) Let's do it this</p> <p>11 way. What I want to do is work from possibility all</p> <p>12 the way up to truth. Okay?</p> <p>13 Possibility, hypothesis, theory and we'll</p> <p>14 just say reality or truth. Okay?</p> <p>15 Is it possible -- do you agree it's possible</p> <p>16 that lightweight mesh is safer for patients than</p> <p>17 heavyweight mesh?</p> <p>18 MR. SNELL: Calls for speculation.</p> <p>19 A. That's -- that's possible.</p> <p>20 Q. (By Mr. De La Cerda) Okay. Now let's</p> <p>21 take the next step.</p> <p>22 Would it be a fair hypothesis that</p> <p>23 lightweight mesh is safer than heavyweight mesh?</p> <p>24 A. That's a hypothesis, period. Not fair, not</p>	<p>1 as explored as is being explored now. And based on --</p> <p>2 on those concepts that were unexplored, we made</p> <p>3 inferences on how we would like the next mesh to be.</p> <p>4 That doesn't take the fact that what we had</p> <p>5 behind us was data from Gynemesh.</p> <p>6 Q. Do you agree that scar contracture can cause</p> <p>7 recurrence of prolapse? This is in terms of if scar</p> <p>8 contracture is happening around Gynemesh, can that</p> <p>9 cause recurrence of prolapse?</p> <p>10 MR. SNELL: Foundation.</p> <p>11 A. Are you talking about the same side or</p> <p>12 opposite side or just in general?</p> <p>13 Q. (By Mr. De La Cerda) In general.</p> <p>14 A. No, that's not the biggest factor on a</p> <p>15 recurrence of a prolapse.</p> <p>16 Q. I'm just going to go through a little list</p> <p>17 right here.</p> <p>18 Do you agree that scar contracture around</p> <p>19 Gynemesh can cause pain?</p> <p>20 A. Contractions of scarring always have the</p> <p>21 potential to decrease the pliability of not only a</p> <p>22 mesh augmented repair but of any -- any repair.</p> <p>23 Q. That was actually going to be my next</p> <p>24 question.</p>
Page 223	Page 225
<p>1 unfair, it's just a hypothesis that we would have to</p> <p>2 test.</p> <p>3 Q. Okay. Is it a fair -- based on what you</p> <p>4 know, is that a hypothesis that could be confirmed?</p> <p>5 A. Well, that's a hypothesis that has much less</p> <p>6 evidence behind it than -- than using Gynemesh.</p> <p>7 Q. The step where you would stop the</p> <p>8 progression, though, would be a theory. You don't</p> <p>9 believe there's enough to support the theory that</p> <p>10 lightweight mesh is safer for patients than</p> <p>11 heavyweight mesh; is that right?</p> <p>12 A. These were -- these were considerations that</p> <p>13 were entertained not at that time. They still</p> <p>14 entertain a scientific meeting. It doesn't mean that</p> <p>15 we're going to go -- go out and start using the</p> <p>16 lightest weight mesh. It doesn't mean -- because we</p> <p>17 understand meshes a lot better now as -- as</p> <p>18 physicians. As surgeons, as scientists, we understand</p> <p>19 it better.</p> <p>20 Now, we knew that what we had would -- would</p> <p>21 give durability. We knew that what we had would</p> <p>22 give -- would be a good product to use for</p> <p>23 reinforcement on augmented repairs. There was --</p> <p>24 there was some concept along the lines that were not</p>	<p>1 First of all, the pliability can lead to</p> <p>2 pain? Like reduced pliability can lead to pain in a</p> <p>3 patient; is that right?</p> <p>4 A. If there's less pliability and there are a</p> <p>5 number of factors to -- for a repair being less</p> <p>6 pliable, but if there is less pliability and the</p> <p>7 tissue is placed under -- under stress, yeah, you</p> <p>8 would -- you would feel more that it would be more</p> <p>9 pliable.</p> <p>10 Q. Could the scar contracture lead to erosion?</p> <p>11 A. No.</p> <p>12 Q. How about discomfort during sex?</p> <p>13 A. Less, less pliability could make things feel</p> <p>14 not -- not as soft, not as elastic.</p> <p>15 Q. Would you agree that for a mesh to be</p> <p>16 successfully used for the treatment of pelvic organ</p> <p>17 prolapse it should be soft and compliant with a</p> <p>18 woman's vaginal tissues?</p> <p>19 A. And that is -- that is an excellent question</p> <p>20 because I would like to define, which I didn't have to</p> <p>21 define before in the medical arena, I didn't have to</p> <p>22 define as much what soft and pliable and elastic is.</p> <p>23 I have tried to come to -- to the conclusion</p> <p>24 that there is a level of the formation of stress that</p>

Jaime Sepulveda, M.D.

Page 226	Page 228
<p>1 is required. You cannot have so much deformation that</p> <p>2 the prolapse comes out, but you still have to have</p> <p>3 some firmness to your repair. In other words, you</p> <p>4 drive your car, you need your shock absorbers to give</p> <p>5 some give, to give some, but you don't want your shock</p> <p>6 absorbers to be bouncing all over the place. It would</p> <p>7 be as uncomfortable as no bouncing at all.</p> <p>8 So when I -- when I take my car for a shock</p> <p>9 absorbers check, they have something that actually</p> <p>10 measures it and they can adjust it. They can adjust</p> <p>11 the damper and give. We don't have that in the</p> <p>12 vagina.</p> <p>13 Q. Ethicon certainly never tested that issue;</p> <p>14 did they?</p> <p>15 MR. SNELL: Objection, lacks foundation.</p> <p>16 A. The vaginal pliability, I think that there</p> <p>17 was some papers about designing a device -- there was</p> <p>18 a paper, actually, Dr. Willy Davila, I believe, was</p> <p>19 testing a device for vaginal pliability; and that</p> <p>20 would be very useful in getting an actual number,</p> <p>21 getting an actual measurement that we can take from.</p> <p>22 Q. (By Mr. De La Cerda) Is that something</p> <p>23 that Ethicon did?</p> <p>24 A. No, I think -- I don't think -- I'm not</p>	<p>1 one but in two, three studies with comparing different</p> <p>2 repairs and native tissue repairs to mesh augmented</p> <p>3 repairs, the vaginal length stays exactly at the</p> <p>4 same -- at the same length.</p> <p>5 Q. (By Mr. De La Cerda) Should Ethicon's</p> <p>6 conclusion -- strike that.</p> <p>7 Should information about the concerns of</p> <p>8 physicians and at least some within Ethicon that</p> <p>9 Gynemesh was too stiff or too rigid for vaginal</p> <p>10 tissues, should that information be included in the</p> <p>11 IFU or no?</p> <p>12 MR. SNELL: Form, asked and answered.</p> <p>13 A. No, I don't think that it needed to be</p> <p>14 included and the fact is that surgeons have the</p> <p>15 options of doing augmented repairs or doing --</p> <p>16 continue doing native tissue repairs. And they will</p> <p>17 have whatever concern they may have with one or the</p> <p>18 other, they have the option of doing one or the other.</p> <p>19 No one mandated to do a mesh repair or a native tissue</p> <p>20 repair at a certain time. But if you went by the data</p> <p>21 and went by the durability and went by the evidence</p> <p>22 about -- with Gynemesh, you have -- you were empowered</p> <p>23 with information to decide one way or the other.</p> <p>24 Ethicon does not tell surgeons who --</p>
Page 227	Page 229
<p>1 aware of Ethicon doing that.</p> <p>2 Q. Would you agree that clinically there may be</p> <p>3 an impact of increased rigidity with any given mesh as</p> <p>4 it may increase vaginal stiffness post-operatively</p> <p>5 with a potential to impair sexual function?</p> <p>6 A. I -- I misspoke on my last answer. I want</p> <p>7 to correct that.</p> <p>8 When I say Ethicon never -- never did that,</p> <p>9 I cannot conclude that because I'm not aware if they</p> <p>10 did or if they didn't, but I'm just -- that's what I'm</p> <p>11 aware of, that I don't know if they did or didn't.</p> <p>12 Q. That's fair.</p> <p>13 Let me go back to my question, the next</p> <p>14 question. Would you agree that clinically there may</p> <p>15 be an impact of increased rigidity with any given mesh</p> <p>16 as it may increase vaginal stiffness post-operatively</p> <p>17 with a potential to impair sexual function?</p> <p>18 MR. SNELL: Form, speculation, incomplete</p> <p>19 hypothetical.</p> <p>20 A. There's -- the papers that we have does</p> <p>21 not -- does not suggest or indicate rigidity. If</p> <p>22 there is a shrinkage or rigidity, it was not</p> <p>23 demonstrated on the measurements of total vaginal</p> <p>24 length. When you measure total vaginal length, not on</p>	<p>1 actually, they never told me, I can tell you that, and</p> <p>2 they would never tell anyone, "You have to do this</p> <p>3 repair with this type of material." And I don't think</p> <p>4 they would include that in the IFU and they would not</p> <p>5 include that on any communication because it's up to</p> <p>6 the surgeon to decide that.</p> <p>7 Q. (By Mr. De La Cerda) So would that be the</p> <p>8 basis for why that information is not -- does not</p> <p>9 need to be included in the IFU, according to your</p> <p>10 opinion?</p> <p>11 A. If the information on the -- on the IFU has</p> <p>12 to do with the product itself and if there's no</p> <p>13 evidence of the product performing one way or the</p> <p>14 other, I would not expect anyone to misrepresent it</p> <p>15 one way or the other. In other words, I don't --</p> <p>16 don't misrepresent it saying that it performs better,</p> <p>17 don't misrepresent it saying that it performs worse.</p> <p>18 Just give me what the evidence shows.</p> <p>19 Q. Would you agree that any future meshes</p> <p>20 developed by Ethicon for pelvic organ prolapse should</p> <p>21 be less rigid than Gynemesh?</p> <p>22 A. I don't -- I don't know if it's going to be</p> <p>23 any development, I don't know if it's -- it's going to</p> <p>24 be on the same rate of damage. I think that --</p>

Jaime Sepulveda, M.D.

Page 230	Page 232
<p>1 THE COURT REPORTER: On the same?</p> <p>2 A. On the same rate of -- on the same rate</p> <p>3 of -- when I say "rate," on the same elasticity or</p> <p>4 pliability of Gynemesh.</p> <p>5 I don't know if it's going to be the same</p> <p>6 stiffness or not. I just don't know what they're</p> <p>7 going to do with the next generation.</p> <p>8 Q. But my question is, though, is: If they are</p> <p>9 going to develop the next generation, do you agree</p> <p>10 that that next generation should be less rigid than</p> <p>11 Gynemesh?</p> <p>12 MR. SNELL: Objection, foundation.</p> <p>13 A. I think we will have to first establish a</p> <p>14 way of rigidity in -- once in the vagina and not just</p> <p>15 on the testing that we have, biomechanical testing.</p> <p>16 We know that biomechanical testing as</p> <p>17 accurate and as elaborate and as complicated as it can</p> <p>18 be, it doesn't always predict the -- the rigidity in</p> <p>19 the vagina, because we don't know how to measure</p> <p>20 rigidity in the vagina. We don't know how you're</p> <p>21 going to measure it.</p> <p>22 Q. Let me shift gears a little bit.</p> <p>23 Okay. You understand before a medical</p> <p>24 device can be marketed in the United States, the FDA</p>	<p>1 A. Marketing -- marketing a device -- marketing</p> <p>2 a device doesn't mean that you cannot -- you cannot</p> <p>3 sell it. I don't think it has the relationship of one</p> <p>4 with the other. If you -- if marketing means someone</p> <p>5 visited me and giving me a brochure and telling me all</p> <p>6 these things about the product, I really want to look</p> <p>7 at the evidence. I will be courteous and I will</p> <p>8 listen to it, but I will go to -- with the evidence.</p> <p>9 And the evidence was, at that time and still</p> <p>10 today, that -- that the materials used were as good as</p> <p>11 a native tissue and was more durable.</p> <p>12 Q. (By Mr. De La Cerda) So you're telling me</p> <p>13 that doctors didn't need to know before they put in</p> <p>14 a Prolift if it hadn't even been cleared by the FDA</p> <p>15 until May 15, 2008?</p> <p>16 MR. SNELL: Same objections.</p> <p>17 Q. (By Mr. De La Cerda) Because there</p> <p>18 were -- there were hundreds, if not thousands, of</p> <p>19 Prolifts put in before it was ever cleared. Do you</p> <p>20 understand that?</p> <p>21 MR. SNELL: Same foundation, objection.</p> <p>22 A. I'm not -- I'm not aware of that specific --</p> <p>23 Q. (By Mr. De La Cerda) We can -- we don't</p> <p>24 even have to have a number. If one was put in</p>
Page 231	Page 233
<p>1 requires that the device receive some level of</p> <p>2 clearance or approval before that marketing happens;</p> <p>3 right?</p> <p>4 A. Yes.</p> <p>5 Q. You're aware that Prolift wasn't cleared for</p> <p>6 marketing in the United States by the FDA until</p> <p>7 May 15, 2008; right?</p> <p>8 MR. SNELL: Form.</p> <p>9 A. There were some -- some dates in there, but</p> <p>10 I don't have the dates complete.</p> <p>11 Q. (By Mr. De La Cerda) You understand that</p> <p>12 Prolift was marketed in the United States for</p> <p>13 approximately three years before it received</p> <p>14 clearance. Do you understand that?</p> <p>15 MR. SNELL: Form, foundation.</p> <p>16 A. Yeah, it's -- it may have been marketed,</p> <p>17 yes. I don't -- I don't know -- I cannot give you an</p> <p>18 accurate answer on that.</p> <p>19 Q. (By Mr. De La Cerda) Should the fact that</p> <p>20 Prolift wasn't cleared for marketing in the United</p> <p>21 States been included in the Prolift IFUs in place</p> <p>22 prior to May 15, 2008?</p> <p>23 MR. SNELL: Form, foundation, misstates the</p> <p>24 regulatory --</p>	<p>1 before it was ever cleared by the FDA, do you think</p> <p>2 it's okay for a doctor to not know that it wasn't</p> <p>3 cleared by the FDA before he puts it in to a</p> <p>4 patient?</p> <p>5 MR. SNELL: Same objection.</p> <p>6 A. It had a 510(k) approval; correct?</p> <p>7 Q. (By Mr. De La Cerda) May 15, 2008. So</p> <p>8 for three years it didn't.</p> <p>9 Have you ever seen the correspondence</p> <p>10 between Ethicon and the FDA about that clearance</p> <p>11 issue?</p> <p>12 MR. SNELL: Same objection, foundation.</p> <p>13 A. I'm not aware of that, no.</p> <p>14 Q. (By Mr. De La Cerda) Are you aware of the</p> <p>15 510(k) being rejected a couple times?</p> <p>16 MR. SNELL: Actually misstates the evidence,</p> <p>17 foundation as well.</p> <p>18 Q. (By Mr. De La Cerda) You haven't seen any</p> <p>19 of that correspondence?</p> <p>20 A. Not -- not on that specific issue, no, I</p> <p>21 have not seen it.</p> <p>22 Q. All right.</p> <p>23 A. But if you give it to me, I'll check it out.</p> <p>24 I'll give an opinion on it. That's -- that's ...</p>

Jaime Sepulveda, M.D.

Page 234	Page 236
<p>1 Q. So let's take the simple fact this product 2 was marketed in the United States before it ever had 3 clearance. Now, before a doctor ever implants the 4 product, do you think it's fair for him not to know 5 that the product he's implanting hasn't even been 6 cleared by the FDA?</p> <p>7 MR. SNELL: Same objection, misstates the 8 evidence and the foundation as to the clearance.</p> <p>9 A. If it's -- I don't want to give you an 10 opinion on something that I haven't seen.</p> <p>11 Q. (By Mr. De La Cerda) As you sit here 12 today, you have not reviewed any of the 13 correspondence between the FDA and Ethicon regarding 14 the clearance of the Prolift under the 510(k) 15 process; right?</p> <p>16 A. I -- I know that Prolift was cleared and I 17 know that there was -- the product had been sold. I 18 just don't know the specifics of when was it cleared 19 and the dates as you're referring to.</p> <p>20 Q. What I want to try to get at now is, as you 21 sit here today, are you going to provide any opinions 22 about the Prolift and the timing of its clearance and 23 what effect that might have on warnings to doctors?</p> <p>24 A. As we sit here today, I cannot give you an</p>	<p>1 Out of all the plaintiff's guys you meet, I'm the 2 nice one.</p> <p>3 MR. SPARKS: Hey.</p> <p>4 MR. DE LA CERDA: He's a nice one, too.</p> <p>5 Q (By Mr. De La Cerda) Let's switch gears a 6 little bit.</p> <p>7 Do you agree with the FDA's viewpoint that 8 there is a need for more rigorous studies regarding 9 the safety and efficacy of transvaginal mesh kits?</p> <p>10 A. The --</p> <p>11 MR. SNELL: Hold on. You said -- can you 12 read that last -- he said transvaginal --</p> <p>13 THE COURT REPORTER: Mesh kits.</p> <p>14 MR. SNELL: I'm going to object, overbroad, 15 to the extent you're including Prolift 16 midurethral slings.</p> <p>17 MR. DE LA CERDA: And I'm not, so I do want 18 to be clear about that.</p> <p>19 When I'm using this term "transvaginal mesh 20 kits," it's transvaginal mesh for the correction 21 of pelvic organ prolapse.</p> <p>22 So let me go back. Let me read the question 23 one more time.</p> <p>24 Q. (By Mr. De La Cerda) Do you agree with</p>
Page 235	Page 237
<p>1 opinion about something that I have not read.</p> <p>2 Q. Okay. And so you know today is my 3 opportunity to question you about this issue. This 4 isn't a new issue, it's been around since 2008. So if 5 you're telling me today that you don't have -- you're 6 not prepared to provide an opinion on that issue, 7 that's great. That sends me down one road.</p> <p>8 If you're telling me today that you do have 9 an opinion, then that's why -- then I would like to 10 ask questions about it. But if you're not going to 11 opine -- if you don't intend to opine on the effect of 12 the timing of the clearance of the Prolift through the 13 510(k) process and that effect on what should be 14 warned or what should be told to doctors about the 15 Prolift, then that's fine and we can move on to the 16 next subject.</p> <p>17 A. No, I can -- I can look at those papers and 18 I cannot give you an opinion at this time about papers 19 that I have not seen.</p> <p>20 Q. Are those papers in your Reliance List?</p> <p>21 A. No, I don't think they're in my Reliance 22 List. If they would be, I would have read it.</p> <p>23 THE WITNESS: Oh, you didn't --</p> <p>24 MR. DE LA CERDA: I'm actually the nice one.</p>	<p>1 the FDA's viewpoint that there is a need for more 2 rigorous studies regarding the safety and efficacy 3 of transvaginal mesh kits, meaning transvaginal mesh 4 for the correction of pelvic organ prolapse?</p> <p>5 A. No, I disagree with that recommendation.</p> <p>6 Q. (By Mr. De La Cerda) Okay. And why is it 7 that you disagree?</p> <p>8 A. I disagree because there was a wealth of 9 data on -- on the use of transvaginal mesh that has 10 been determined by more than 400 surgeons -- 400 11 active surgeons that it was adequate.</p> <p>12 The decision of the FDA, with all due 13 respect to the organization or to whoever put the time 14 and put their effort in sitting on that committee, did 15 not -- did not translate on or did not convey the 16 experience of all the surgeons.</p> <p>17 Q. Did you ever actually see the FDA's 522 18 orders that were issued with regard to Gynemesh, 19 Prolift and Prosima?</p> <p>20 A. I did -- I did read about those, yes.</p> <p>21 Q. Do you know what these orders required of 22 Ethicon?</p> <p>23 A. Yes. I -- I read about the requirements and 24 I also read at one time the response of Ethicon to the</p>

60 (Pages 234 to 237)



Jaime Sepulveda, M.D.

Page 238	Page 240
<p>1 FDA.</p> <p>2 Q. That was my next question. Do you know what</p> <p>3 is it that Ethicon did in response to the 522 orders?</p> <p>4 A. They -- they made a statement along the</p> <p>5 lines of what I just mentioned, that there were</p> <p>6 studies, not only RCTs, not only -- but also cohort</p> <p>7 studies that show the benefits in durability, it</p> <p>8 showed the safety profile, it showed risk and</p> <p>9 complications, very well delineated in ways that no</p> <p>10 other repair had been addressed.</p> <p>11 Q. Did you also see any information regarding</p> <p>12 Ethicon's estimate on the cost to have complied with</p> <p>13 the 522 orders?</p> <p>14 A. I did not see the exact cost, but I know</p> <p>15 that any -- any study is costly.</p> <p>16 Q. And Ethicon ultimately decided not to</p> <p>17 perform what was discussed within the 522 orders;</p> <p>18 correct?</p> <p>19 A. That's -- that's what I -- I -- I saw from</p> <p>20 the -- from that process, from that specific process.</p> <p>21 Q. Ultimately, Ethicon decided to pull those</p> <p>22 products from the market; right? Prolift and Prosima</p> <p>23 were pulled from the market; correct?</p> <p>24 A. Yes.</p>	<p>1 called "decommercialization" and labeled that as</p> <p>2 what it did for the Prolift and the Prosima, point</p> <p>3 is ultimately Prolift and Prosima they stopped</p> <p>4 selling; right?</p> <p>5 MR. SNELL: Form, predicate.</p> <p>6 A. Yes.</p> <p>7 Q. (By Mr. De La Cerda) Gynemesh they</p> <p>8 changed the indication; right?</p> <p>9 A. That's -- yeah, I became aware of that.</p> <p>10 Q. And that avoided Ethicon having to comply</p> <p>11 with the studies required in the 522 orders; correct?</p> <p>12 MR. SNELL: Objection, speculation.</p> <p>13 A. I don't agree with that --</p> <p>14 Q. (By Mr. De La Cerda) Why not?</p> <p>15 A. -- last statement. Because I'm not -- I'm</p> <p>16 disagreeing on the basis that there's -- they could</p> <p>17 not continue without doing the 5- -- the 522s. I</p> <p>18 think that a fair trial of this would have been to at</p> <p>19 least be on the committee that the FDA had. And there</p> <p>20 was actually the voice of surgeons saying these are --</p> <p>21 this is the evidence and part of the evidence was</p> <p>22 presented on a communication. It was signed by over</p> <p>23 400 surgeons and still that was ignored.</p> <p>24 And that has less to do with what Ethicon</p>
Page 239	Page 241
<p>1 Q. And then Gynemesh, the indication was</p> <p>2 changed from -- well, I guess before there were two</p> <p>3 indications, then they changed it to just one. So now</p> <p>4 the indication for transvaginal implant was removed</p> <p>5 and now it's just abdominal sacrocolpopexy; is that</p> <p>6 right?</p> <p>7 A. That's correct.</p> <p>8 MR. SNELL: I'm going to object. Wait.</p> <p>9 Wait.</p> <p>10 THE WITNESS: Okay.</p> <p>11 MR. SNELL: Objection, foundation, misstates</p> <p>12 the evidence and the clearance.</p> <p>13 So go ahead.</p> <p>14 Q. (By Mr. De La Cerda) So that's -- is that</p> <p>15 your understanding of what was done is that Prolift</p> <p>16 and Prosima were pulled from the market but Gynemesh</p> <p>17 wasn't, just its indication was changed?</p> <p>18 MR. SNELL: I'm going to have to object. I</p> <p>19 didn't hear "pulled from the market." Same</p> <p>20 objection, misstates the evidence.</p> <p>21 If you take my basis, I'm sure you can get a</p> <p>22 clean question and answer.</p> <p>23 Q. (By Mr. De La Cerda) What I'll do is I'll</p> <p>24 ask it this way: When Ethicon invented a word</p>	<p>1 could do, the way I look at it, the way I appreciate</p> <p>2 it, and more to the fact that the FDA decided no, this</p> <p>3 is the way it's going to be, 522s or -- or not. So</p> <p>4 what could they do?</p> <p>5 Q. This is an interesting point that's come up</p> <p>6 in my mind. Why is it that the physicians didn't</p> <p>7 petition Ethicon to comply with the 522 orders? If</p> <p>8 the product was so good, why don't the physicians say,</p> <p>9 "Hey, Ethicon, this stuff is great, do the 522 orders,</p> <p>10 we know it's going to turn out great, we all win"?</p> <p>11 Why was there no petition for Ethicon to do</p> <p>12 that?</p> <p>13 MR. SNELL: Calls for speculation.</p> <p>14 A. I -- I don't know. That's exactly -- I'm</p> <p>15 going to -- I'm going to probably answer it that way</p> <p>16 because it calls for speculation.</p> <p>17 Q. (By Mr. De La Cerda) Ultimately, if the</p> <p>18 product's great, why didn't Ethicon do the studies?</p> <p>19 Have you ever been provided a rationale as</p> <p>20 to why Ethicon decided not to do the 522 studies?</p> <p>21 A. No, there was no -- no rationale and we</p> <p>22 still cannot find a rationale for that, for not</p> <p>23 complying with the 522. I think that you can -- you</p> <p>24 cannot tell a company how they're going to go about</p>

61 (Pages 238 to 241)

Jaime Sepulveda, M.D.

Page 242	Page 244
<p>1 their -- running their business. Although I would 2 like, yeah, to have that power to tell everyone to run 3 their business, it's not like I'm going to be listened 4 on that. And there are other considerations that they 5 may have.</p> <p>6 I can tell you that from a surgeons' 7 perspective, yeah, we could have been compelled -- 8 going along the statement that you just made, we could 9 have been compelled to go to Ethicon and I think that 10 that was conveyed at some point, but there's no -- no 11 way to go about it when you're imposed a 522 just off 12 like that.</p> <p>13 And I think that part of it -- just to 14 elab- -- elaborate on that -- part of it was that we 15 saw -- we signed that petition, we signed that letter, 16 we say, "Please reconsider this. Let's find another 17 method to do this. There has to be a better method to 18 do this." And I think ten years from now we're going 19 to look back on this and we're going to say that was 20 an inadequate method. It was too rigid and we have to 21 find other methods to have these devices available to 22 surgeons.</p> <p>23 Q. Is it necessarily a bad thing, though, for 24 clinical studies to be required before another</p>	<p>1 it.</p> <p>2 Q. What do you mean by the "communication"? 3 Did Ethicon say, "Hey, take it off your shelves"? 4 A. No, we have a product manager in the 5 operating room and any of us that have -- any surgeon 6 that receives a letter would go and send it right away 7 to the product manager.</p> <p>8 Q. And what did the letter say? 9 A. That's the decommercialization letter. 10 Q. Okay. 11 A. And that was it. 12 Q. And so at the time it was decommercialized 13 did those products then get pulled from the shelves of 14 the hospital? 15 A. Yeah, that's it, they're in a separate cart 16 and the cart doesn't work anymore. I actually tried 17 to find one a few -- a few months later, I couldn't 18 find it. No, that goes to a facility, gets destroyed, 19 that's it.</p> <p>20 Q. Okay. Here's a few statements, I want to 21 see if you agree with them. 22 Do you agree serious complications 23 associated with surgical mesh for transvaginal repair 24 of pelvic organ prolapse are not rare?</p>
Page 243	Page 245
<p>1 transvaginal pelvic organ prolapse mesh is put on the 2 market? I mean, is that a bad thing? Isn't that a 3 good thing because it can ensure safety for patients? 4 MR. SNELL: Form.</p> <p>5 A. I could -- let me tell you, I'm -- by now, 6 you know that I have done research in one way or 7 another for 25 years and I sponsor individuals to do 8 research and I believe in research and I believe in 9 evidence.</p> <p>10 I can -- I will never be able to say, "Oh, 11 no, we don't need another study." I think that 12 everybody wants another study, but the fact is that 13 are we going to put individuals through a study when 14 we have evidence from -- from before, multiple 15 randomized control trials, how fair is that to do 16 another study with women when we have evidence of how 17 it works?</p> <p>18 Q. (By Mr. De La Cerda) Do you know if any 19 of the hospitals that you have privileges at had any 20 Prolift or Prosima devices leftover after Ethicon 21 stopped selling those products? 22 A. No, that's -- in my -- my hospital, there 23 was -- it was not there. Basically the communication 24 came in and the communication is clear and that was</p>	<p>1 A. They are rare. 2 Q. They are rare? 3 A. They are rare. 4 Q. So you disagree with that statement? 5 A. I disagree with the statement that they are 6 not rare. 7 Q. Do you agree that there is no evidence that 8 transvaginal repair with mesh provides any added 9 benefit compared to traditional surgery without mesh? 10 A. That's inaccurate and it's not supported by 11 evidence. 12 Q. So you disagree with that one? 13 A. I do. 14 Q. Do you agree that it's not clear that 15 transvaginal repair with mesh is more effective than 16 traditional non-mesh repair in all patients with 17 pelvic organ prolapse and it may expose patients to 18 greater risk? Do you agree or disagree with that? 19 A. I disagree with that. 20 Q. Do you agree that mesh used in transvaginal 21 pelvic organ prolapse repair introduces risks not 22 present in traditional non-mesh surgery for pelvic 23 organ prolapse repair? 24 A. I -- in a general sense, I disagree with</p>

Jaime Sepulveda, M.D.

Page 246	Page 248
<p>1 that except with a fact that the risk is inherent to 2 the implant only.</p> <p>3 Q. Which would be exposure; right?</p> <p>4 A. Which would be mesh exposure.</p> <p>5 Q. Mesh exposure. Mesh exposure.</p> <p>6 Okay. Do you agree mesh placed abdominally 7 for a pelvic organ prolapse repair results in lower 8 rates of mesh complications compared to transvaginal 9 pelvic organ prolapse surgery with mesh?</p> <p>10 A. I don't agree -- I don't agree with that. 11 And the basis for my disagreement with it isn't only 12 the clinical -- the clinical evidence, but also my 13 experience.</p> <p>14 Q. Do you agree that native tissue repairs have 15 similar outcomes to synthetic mesh without the risks 16 inherent in mesh use?</p> <p>17 MR. SNELL: Form, vague.</p> <p>18 A. They -- the evidence shows in randomized 19 control trials that native tissue repairs have 20 other -- other risks.</p> <p>21 Q. (By Mr. De La Cerda) So you would 22 disagree with this statement; right?</p> <p>23 A. Yes, I would.</p> <p>24 Q. Do you agree or disagree the native</p>	<p>1 correct?</p> <p>2 MR. SNELL: Same objection, speculation, 3 incomplete hypothetical.</p> <p>4 A. It's a -- it's reasonable on the basis of 5 human nature.</p> <p>6 Q. (By Mr. De La Cerda) At any point after 7 the July, 2011, FDA warning, did you decide to stop 8 using Prosima, Prolift or Gynemesh transvaginally?</p> <p>9 A. I think that everyone look at it and 10 everyone stop using it for the wrong reasons, less 11 because of evidence, and more because of the -- of the 12 fear of being involved in litigation, which is real, 13 and being involved in a situation having to explain 14 themselves when there is not a clear -- a clear 15 picture about the reality of it.</p> <p>16 Q. But you did stop using Prosima, Prolift and 17 Gynemesh transvaginally at some point after the July, 18 2011, FDA warning; right?</p> <p>19 A. I -- I think I continue using what -- what 20 it did, it did happen is that I communicated, "Listen, 21 we need to take a look at this," but I continued using 22 it.</p> <p>23 Q. You continued implanting it?</p> <p>24 A. Yes.</p>
Page 247	Page 249
<p>1 tissue -- strike that.</p> <p>2 Do you believe it would be a reasonable 3 decision for a doctor to stop using the Prosima device 4 following the July, 2011, FDA warning?</p> <p>5 MR. SNELL: Incomplete hypothetical, 6 speculation.</p> <p>7 A. I think that there's a -- I mean, I will 8 have to think for all the other surgeons, but I think 9 it's reasonable whenever you have a letter from an 10 organization like the FDA and you -- all of us not 11 being completely -- completely aware of that process 12 on how it came through, it comes as a surprise that we 13 don't have a problem. I think it comes as a surprise 14 not only for us, it comes as a surprise for the 15 patients.</p> <p>16 Q. (By Mr. De La Cerda) So it would be 17 reasonable for a doctor to do that?</p> <p>18 A. I think it's reasonable for anyone to think 19 that there's something wrong and it requires a lot of 20 reading and a lot of research to really be in tune 21 with the reality.</p> <p>22 Q. And so it would also be reasonable for a 23 doctor to stop using the Prolift and the Gynemesh 24 transvaginally after that July, 2011, FDA warning;</p>	<p>1 Q. Until they were pulled from the market or 2 stopped, they were stopped selling or 3 decommercialized; right?</p> <p>4 A. Yes, once you have -- you have that, I 5 don't -- I don't want to use it.</p> <p>6 Q. Do you agree -- do you agree that surgical 7 mesh to repair pelvic organ prolapse is a high-risk 8 device?</p> <p>9 A. It's a --</p> <p>10 MR. SNELL: Foundation.</p> <p>11 Go ahead.</p> <p>12 A. It's a game like talking about 522, some 13 510(k)s, high risk, low risk, it's not -- it's not 14 scientifically accurate.</p> <p>15 I do agree that if you're going -- if you're 16 going to use it, you need to be well-trained on it, 17 and you just don't start doing prolapse or continence 18 procedures because a device is easy to use. You still 19 have to be trained and read what's behind all that. 20 That's my opinion of how I run my professional career. 21 It's my -- my profession.</p> <p>22 That's how we do it on credentialing in my 23 hospital, that's going to be up to the credentialing 24 institutions and the physicians to decide how much</p>

63 (Pages 246 to 249)

Jaime Sepulveda, M.D.

Page 250	Page 252
<p>1 training they will -- they will have.</p> <p>2 Q. (By Mr. De La Cerda) And so at this</p> <p>3 point, you can't tell me whether you can label</p> <p>4 surgical mesh to repair pelvic organ prolapse as</p> <p>5 high risk; right?</p> <p>6 A. Yeah, it's labeled high risk and there's</p> <p>7 communication from the FDA labeling it high risk.</p> <p>8 What I -- I can tell you is that the terminology of</p> <p>9 high risk or low risk brings other implications. If</p> <p>10 you look at the evidence, I will say, "Well, you know,</p> <p>11 it's really a risky procedure like any surgery."</p> <p>12 Q. And so you're not going to offer testimony</p> <p>13 that the Gynemesh implanted transvaginally or the</p> <p>14 Prosima or Prolift are low-risk devices, are you?</p> <p>15 MR. SNELL: Objection, misstates his prior</p> <p>16 testimony.</p> <p>17 Go ahead.</p> <p>18 A. I will not go with low risk or high risk. I</p> <p>19 think that whole terminology is so -- is so</p> <p>20 nonspecific. What's -- if I -- if you compare it to a</p> <p>21 heart surgery, if you compare it to -- to any other --</p> <p>22 an appendectomy, there's always risk. So I cannot</p> <p>23 classify one way or the other.</p> <p>24 There's -- there's -- I believe that there</p>	<p>1 does not do better than a native tissue repair in</p> <p>2 terms of safety and efficacy, do you think it should</p> <p>3 be introduced to the market?</p> <p>4 MR. SNELL: Foundation.</p> <p>5 Go ahead.</p> <p>6 A. The -- the basis for Prosima for any other</p> <p>7 procedure, they don't do well with whatever benchmark</p> <p>8 that you use, you need to reconsider, you need -- you</p> <p>9 have a choice in the market, obviously, but there's --</p> <p>10 that's not what we saw with Prosima. The cohort</p> <p>11 studies done on Prosima follow the experience with</p> <p>12 Prolift and it showed that it was better than native</p> <p>13 tissue repairs.</p> <p>14 Q. (By Mr. De La Cerda) You're aware that</p> <p>15 Ethicon was told by some of its top consultants it</p> <p>16 did not make sense to use the Prosima in people with</p> <p>17 lesser degrees of prolapse given the outcomes?</p> <p>18 A. Any consultant may have an opinion. That's</p> <p>19 something that -- that's something that Ethicon always</p> <p>20 foster for anyone to give an opinion. And it's not</p> <p>21 like we were that shy of giving an opinion because we</p> <p>22 actually offer plenty of it.</p> <p>23 Q. Would you disagree with that -- this</p> <p>24 particular opinion?</p>
Page 251	Page 253
<p>1 is more to that high-risk, low-risk classification</p> <p>2 than what we can actually explain on the frame of a</p> <p>3 deposition.</p> <p>4 Q. (By Mr. De La Cerda) Do you know whether</p> <p>5 or not Ethicon did an internal risks analysis to</p> <p>6 determine risk scores for the pelvic organ prolapse</p> <p>7 mesh devices? Like whether they were going to --</p> <p>8 whether Ethicon was going to label them low,</p> <p>9 moderate, high risk?</p> <p>10 A. I'm not aware of them doing that and</p> <p>11 actually, there's -- there was an effort, not by</p> <p>12 Ethicon but by the professional societies to use the</p> <p>13 Dindo classification and modify it for -- for</p> <p>14 prolapse. So that's -- that tells you the extent.</p> <p>15 The reason why I'm explaining is it tells</p> <p>16 you the extent of how elaborate the process is. I</p> <p>17 don't think that Ethicon probably -- I think they were</p> <p>18 too busy with other things to develop anything,</p> <p>19 anything like that.</p> <p>20 Q. Let's switch gears a little bit here.</p> <p>21 Are you okay on breaks?</p> <p>22 A. I'm good.</p> <p>23 Q. Okay. We are getting close. Okay.</p> <p>24 If a synthetic graft product like Prosima</p>	<p>1 A. I disagree.</p> <p>2 Q. Do you agree or disagree with the following</p> <p>3 statement: There is no authoritative paper to support</p> <p>4 that Prosima outcomes are superior or even comparable</p> <p>5 to colporrhaphy?</p> <p>6 A. I disagree with that, and the papers are</p> <p>7 authoritative and within the context of evidence</p> <p>8 previously gathered by the use of Gynemesh and</p> <p>9 Prolift.</p> <p>10 Q. So if the primary investigator for the</p> <p>11 Prosima trial which studied whether or not the product</p> <p>12 was effective for Grade II and III rectocele and</p> <p>13 cystoceles made that statement, you would disagree</p> <p>14 with her?</p> <p>15 A. I'm not aware -- are you speaking about</p> <p>16 Dr. Zyczynski?</p> <p>17 Q. I guess ultimately -- you know, what I'll</p> <p>18 do, I'll just withdraw the question. I think you've</p> <p>19 already answered anyway.</p> <p>20 You disagree with the prior statement, so I</p> <p>21 think you answered that anyway.</p> <p>22 A. I'm going to refer to her on first name</p> <p>23 because I think that she will be okay with it. Her</p> <p>24 first name is Halina, H-a-l-i-n-a.</p>

64 (Pages 250 to 253)

Jaime Sepulveda, M.D.

Page 254	Page 256
<p>1 Q. If the overall consensus of a medical device 2 company's consultants and experts is that it would be 3 a mistake to launch a device on the market, do you 4 think it would be wrongful for the company to launch 5 that device anyway?</p> <p>6 A. The --</p> <p>7 MR. SNELL: Wait. Hold on. Objection, 8 speculation, incomplete hypothetical.</p> <p>9 A. The fact that you are a scientist doesn't 10 always mean that you're going to know marketing. 11 That's -- there's more than one person making those 12 decisions.</p> <p>13 Q. (By Mr. De La Cerda) So you don't believe 14 that it would necessarily be wrongful for a company 15 to launch a product under those circumstances; is 16 that right?</p> <p>17 MR. SNELL: Same objection.</p> <p>18 A. I think there's more than one opinion that 19 needs to be considered, especially in a multicenter 20 study.</p> <p>21 Q. If the overall consensus of a medical device 22 company's scientists and experts is that it would be a 23 mistake to launch the device on to a market, do you 24 think that doctors or patients who are provided the</p>	<p>1 MR. SNELL: Hold on. You've got to give me 2 a chance.</p> <p>3 Form, foundation.</p> <p>4 Go ahead.</p> <p>5 A. No, it's -- I don't think that's -- that 6 that should be considered. I think that the 7 scientific evidence supersedes whoever feels that it's 8 in so much power to say, "Oh, it's reckless because I 9 say it's reckless."</p> <p>10 Well, this is the evidence, this is the 11 scientific evidence, this is the multicenter evidence. 12 If you insist on calling it reckless or giving an 13 irresponsible opinion, which is what it is, then it's 14 up to you, but this is the evidence on this device.</p> <p>15 Q. (By Mr. De La Cerda) So Marcus Carey, you 16 know, is the inventor of Prosima; right?</p> <p>17 A. Yes.</p> <p>18 Q. And you know he received -- he would receive 19 royalties each time the Prosima was sold; right?</p> <p>20 MR. SNELL: Foundation.</p> <p>21 A. I -- I'm aware that he got paid for his 22 work.</p> <p>23 Q. (By Mr. De La Cerda) Do you know how much 24 he got paid?</p>
Page 255	Page 257
<p>1 device should be told the company's scientists and 2 experts think that the device is a mistake?</p> <p>3 MR. SNELL: Form, foundation, incomplete 4 hypothetical.</p> <p>5 A. Yeah, I don't think that any company is 6 going to tell you, "Yeah, I'm going to release it and 7 it's mistake."</p> <p>8 No, the evidence is there and -- and the 9 evidence was so very clear with Prosima. It was 10 presented in modules, it was presented on the number 11 of patients, it was presented in a multicenter study. 12 It had all the qualities of a good cohort study.</p> <p>13 Q. (By Mr. De La Cerda) So you don't think 14 that a doctor or -- a doctor who's implanting a 15 Prosima or a patient who's going to receive a 16 Prosima wants to know before that Prosima is put in 17 that at some point the top consultants and experts 18 at the company believe that Prosima was a mistake, 19 they believe it was a reckless product, that they 20 believe if they put the product out on the market 21 they were going to stop working with Ethicon, you 22 don't think any of that information should be 23 provided to doctors or patients?</p> <p>24 A. No.</p>	<p>1 A. No.</p> <p>2 Q. Do you know he was the lead author on the 3 Prosima study done by Ethicon prior to launch?</p> <p>4 A. There was the first one and then there was 5 another study.</p> <p>6 Q. Do you know what his success rate was with 7 the Prosima in that first study?</p> <p>8 A. It's -- on the -- the first study was 9 around -- above the hymenal ring, I believe it was in 10 the '70s.</p> <p>11 Q. What about below? Below the -- I just lost 12 the word. Hymenian, is that what you said?</p> <p>13 A. Hymenal ring.</p> <p>14 Q. Hymenal ring.</p> <p>15 MR. SNELL: Let me caution you. If you have 16 a study, you should pull it out and look at it. 17 He's not asking you to guess. I mean, we have 18 all this stuff here, you can look at it.</p> <p>19 THE WITNESS: Okay.</p> <p>20 MR. SNELL: I don't know where you have it, 21 but I would assume it's in one of these things.</p> <p>22 A. This is it. This is the study.</p> <p>23 Q. (By Mr. De La Cerda) Okay. So go back to 24 the question. Do you know what his success rate was</p>

65 (Pages 254 to 257)



Jaime Sepulveda, M.D.

<p style="text-align: right;">Page 258</p> <p>1 with the Prosima in his first study?</p> <p>2 A. Let me look through it and I'll --</p> <p>3 73.9 percent.</p> <p>4 Q. And you say that is above or below the</p> <p>5 hymenal ring?</p> <p>6 A. That's about the hymenal ring.</p> <p>7 Q. And how about below the hymenal ring?</p> <p>8 A. The rest of it.</p> <p>9 Q. What do you mean "the rest of it"?</p> <p>10 A. The other percentage.</p> <p>11 Q. So it's 70/30?</p> <p>12 A. Yes, it's 70 -- yes, it's 73.9 versus</p> <p>13 20-something. Either one, yeah.</p> <p>14 Q. Do you think the fact that he was the</p> <p>15 inventor of the product introduced bias in that study?</p> <p>16 THE WITNESS: Let me point out -- do you</p> <p>17 see -- you saw that, right?</p> <p>18 MR. SNELL: Okay.</p> <p>19 A. Please repeat the question.</p> <p>20 Q. Sure.</p> <p>21 Do you think the fact that he was the</p> <p>22 inventor of the Prosima introduced bias into that</p> <p>23 study?</p> <p>24 A. No.</p>	<p style="text-align: right;">Page 260</p> <p>1 Prolift?</p> <p>2 A. It was a group.</p> <p>3 Q. It was a group, right.</p> <p>4 A. It was a group.</p> <p>5 Q. You've relied on -- have you relied on data</p> <p>6 and literature published by Dr. Cosson and the TVM</p> <p>7 group to support your conclusions that Prolift is safe</p> <p>8 and effective?</p> <p>9 MR. SNELL: Same objection.</p> <p>10 A. Well, there was a TVM and there was Prolift.</p> <p>11 And TVM was a precursor, but is different from the</p> <p>12 product on Prolift.</p> <p>13 Q (By Mr. De La Cerda) Okay. Do you know if</p> <p>14 Dr. Cosson receives royalties for the Prolift or</p> <p>15 received?</p> <p>16 A. No, I don't -- I'm not aware of what he</p> <p>17 received.</p> <p>18 Q. Do you believe that an inventor who receives</p> <p>19 royalties for selling his invention can be potentially</p> <p>20 biased when publishing data regarding his invention?</p> <p>21 MR. SNELL: Speculation.</p> <p>22 A. I don't -- I don't see them being biased. I</p> <p>23 have no reason to believe that would be the case.</p> <p>24 Q. (By Mr. De La Cerda) You're very</p>
<p style="text-align: right;">Page 259</p> <p>1 Q. Why not?</p> <p>2 A. I have no reason to believe that he would be</p> <p>3 bias with it.</p> <p>4 Q. Do you know whether Ethicon thought there</p> <p>5 was a fair amount of spin going on regarding Dr. Carey</p> <p>6 reporting of his clinical data?</p> <p>7 A. Fair amount of?</p> <p>8 Q. Spin. Have you ever heard that term "spin,"</p> <p>9 spinning the data, spinning the information?</p> <p>10 A. No, no.</p> <p>11 Q. Like the politicians do?</p> <p>12 A. I have no reason to believe that</p> <p>13 Professor Carey had any deviations from what he would</p> <p>14 honestly do.</p> <p>15 Q. Do you know whether Ethicon believed that</p> <p>16 Dr. Carey was spinning the data?</p> <p>17 A. No. No, I don't -- I'm not aware of that.</p> <p>18 Q. The inventor of Prolift, Dr. Cosson,</p> <p>19 C-o-s-s-o-n --</p> <p>20 A. Cosson.</p> <p>21 Q. Cosson.</p> <p>22 MR. SNELL: Misstates, lacks foundation.</p> <p>23 You've got the wrong person.</p> <p>24 Q (By Mr. De La Cerda) Is he the inventor of</p>	<p style="text-align: right;">Page 261</p> <p>1 trusting. You're very trusting.</p> <p>2 A. This is high caliber -- high-caliber</p> <p>3 investigators.</p> <p>4 Q. Well paid, too.</p> <p>5 You're aware that Ethicon had an alternative</p> <p>6 mesh to Gynemesh PS that they believe would cause</p> <p>7 fewer compli- -- fewer serious complications at least</p> <p>8 as early as 2006; right?</p> <p>9 MR. SNELL: Foundation, misstates the</p> <p>10 evidence.</p> <p>11 A. Could you please repeat that?</p> <p>12 Q. (By Mr. De La Cerda) Sure.</p> <p>13 Are you aware that Ethicon had an</p> <p>14 alternative mesh to Gynemesh PS that they believed</p> <p>15 would cause fewer complications at least as early as</p> <p>16 2006?</p> <p>17 MR. SNELL: Same objections.</p> <p>18 A. No, I'm not aware of that, any mesh like</p> <p>19 that, but I'm also aware that there's very low</p> <p>20 likelihood that there was any evidence strong enough</p> <p>21 for Prolene polypropylene.</p> <p>22 Q. (By Mr. De La Cerda) What do you mean by</p> <p>23 that?</p> <p>24 A. The evidence on Prolene polypropylene, on</p>

66 (Pages 258 to 261)

Jaime Sepulveda, M.D.

Page 262	Page 264
<p>1 the behavior of the material, it's -- it was</p> <p>2 well-established by the time Gynemesh PS came in.</p> <p>3 Q. So you don't believe it's possible that</p> <p>4 Ethicon can have evidence that it had a mesh different</p> <p>5 from Gynemesh that they believe was safer than</p> <p>6 Gynemesh?</p> <p>7 MR. SNELL: Objection, same objection.</p> <p>8 A. I believe it's possible to have another</p> <p>9 mesh. What I don't believe is that the mesh could be</p> <p>10 based to be safer or with more evidence.</p> <p>11 Q. (By Mr. De La Cerda) Okay. I'm going to</p> <p>12 ask you whether you agree with the following</p> <p>13 statements.</p> <p>14 Do you agree that physicians should be</p> <p>15 aware -- made aware of all of the significant safety</p> <p>16 risks associated with the product in the IFU?</p> <p>17 MR. SNELL: Objection, asked and answered.</p> <p>18 I think he's testified three times on this.</p> <p>19 A. The -- the risk of the IFU should pertain to</p> <p>20 the device. There is no place in the IFU to make a</p> <p>21 more comprehensive guide for incontinence, nor should</p> <p>22 the IFU replace training, expertise and textbook</p> <p>23 reading.</p> <p>24 Q. (By Mr. De La Cerda) But you agree that</p>	<p>1 for it to exclude known hazards or complications?</p> <p>2 MR. SNELL: Form.</p> <p>3 Q. (By Mr. De La Cerda) There are</p> <p>4 circumstances where I think you believe that it can</p> <p>5 exclude known hazards and complications; right?</p> <p>6 MR. SNELL: Same objections.</p> <p>7 A. Things that are not at risk to the patient.</p> <p>8 Q. (By Mr. De La Cerda) No, I mean -- okay.</p> <p>9 If it's a known hazard or complication to it</p> <p>10 that could happen to a patient, should it ever be</p> <p>11 excluded from an IFU?</p> <p>12 MR. SNELL: Same objection.</p> <p>13 A. If it's -- if the complication or the side</p> <p>14 effect is the same as it would happen with a native</p> <p>15 tissue repair, I believe that it does not have to be</p> <p>16 included on the IFU.</p> <p>17 Q. (By Mr. De La Cerda) Okay. Do native</p> <p>18 tissue repairs result in chronic foreign body</p> <p>19 reaction?</p> <p>20 A. Yes.</p> <p>21 Q. How is that?</p> <p>22 A. There's a reaction to sutures. There's the</p> <p>23 plication of tissue that dehisces. There is the</p> <p>24 formation of hematomas or granulomas. There are the</p>
Page 263	Page 265
<p>1 all significant safety risks associated with the</p> <p>2 product should be included; right?</p> <p>3 MR. SNELL: Objection, misleads prior</p> <p>4 testimony.</p> <p>5 Go ahead.</p> <p>6 A. With the -- with the product specifically</p> <p>7 associated to the device and -- and -- and the mesh.</p> <p>8 Q. (By Mr. De La Cerda) Is that a "yes"?</p> <p>9 MR. SNELL: Objection, asked and answered.</p> <p>10 A. To the device and mesh, yes.</p> <p>11 Q. (By Mr. De La Cerda) Okay. Do you agree</p> <p>12 that a manufacturer of a medical device that would</p> <p>13 be implanted in a woman's body is required --</p> <p>14 actually, strike that.</p> <p>15 Do you agree that an IFU should never</p> <p>16 exclude known hazards or complications?</p> <p>17 MR. SNELL: Objection, I think this is all</p> <p>18 asked and answered. He's given the same opinions</p> <p>19 numerous times.</p> <p>20 Go ahead.</p> <p>21 A. The IFU should talk about the things that</p> <p>22 are inherent to the device. It's -- it's a guide</p> <p>23 about the device.</p> <p>24 Q. (By Mr. De La Cerda) Can't -- is it okay</p>	<p>1 inherent conditions of the host that could cause it,</p> <p>2 such as atrophy, autoimmune disorders, lichen planus.</p> <p>3 So there are a number of conditions that can make a</p> <p>4 native tissue repair not work, not work well or have</p> <p>5 granulation tissue or have chronic -- chronic</p> <p>6 inflammation.</p> <p>7 Q. Chronic inflammation. Okay.</p> <p>8 Do you agree that if a patient undergoes the</p> <p>9 TVT procedure under general anesthetic, it has the</p> <p>10 potential to put the patient at increased risk for</p> <p>11 urinary retention or urethral erosion?</p> <p>12 A. No.</p> <p>13 Q. And why is that?</p> <p>14 A. Initially, the idea was that when you put a</p> <p>15 midurethral sling, which is tension free, that you</p> <p>16 have to adjust it so the patient would not be on</p> <p>17 retention.</p> <p>18 It was -- it was later described that that</p> <p>19 may have been true for previous slings that were used</p> <p>20 ideally for vesical junction, but not for midurethral</p> <p>21 slings. Eventually, the data proved that to be</p> <p>22 correct, because the rate of voiding dysfunction was</p> <p>23 below 1 percent.</p> <p>24 So one of the -- one of the things that that</p>

67 (Pages 262 to 265)

Jaime Sepulveda, M.D.

Page 266	Page 268
<p>1 experience validated is something that they didn't</p> <p>2 know, not even the inventor actually knew that, which</p> <p>3 is that there is some viscoelasticity to the implant</p> <p>4 itself.</p> <p>5 MR. DE LA CERDA: Okay. What I'd like to do</p> <p>6 now is take a break and review my notes and</p> <p>7 then --</p> <p>8 MR. SNELL: I'm ready for another bathroom</p> <p>9 break.</p> <p>10 MR. DE LA CERDA: We'll go off the record,</p> <p>11 thank you.</p> <p>12 (Thereupon, a recess was taken from</p> <p>13 3:24 p.m. until 3:45 p.m., after which the</p> <p>14 following proceedings were held:)</p> <p>15 Q. (By Mr. De La Cerda) Okay. Doctor, we're</p> <p>16 back on the record.</p> <p>17 There was one thing you mentioned that I</p> <p>18 wanted to make sure was clear. When we were talking</p> <p>19 about the compensation you had received as a</p> <p>20 consultant and then we had a discussion about trying</p> <p>21 to get --</p> <p>22 MR. SNELL: I haven't gotten that either.</p> <p>23 MR. DE LA CERDA: That's fine. That's fine.</p> <p>24 Get a better version.</p>	<p>1 Q. Okay. Okay. And then have you had a chance</p> <p>2 to review that on your own, that spreadsheet?</p> <p>3 A. I saw it before -- before the Cavness trial</p> <p>4 and I saw it at the Cavness trial.</p> <p>5 Q. And are you sure one way or the other</p> <p>6 whether those numbers are allocated versus real</p> <p>7 numbers?</p> <p>8 A. They're -- I know they're not real numbers</p> <p>9 because I would have -- I would have remembered that.</p> <p>10 Q. Yeah.</p> <p>11 A. The number is -- is high, and I don't</p> <p>12 remember having 1099s that were that high.</p> <p>13 Q. Okay. Okay. Have you understood all of my</p> <p>14 questions today?</p> <p>15 A. Yes, sir.</p> <p>16 Q. Have you answered them truthfully and to the</p> <p>17 best of your ability?</p> <p>18 A. Absolutely.</p> <p>19 Q. Is there any testimony that you would like</p> <p>20 to go back and change at this point?</p> <p>21 A. No.</p> <p>22 MR. DE LA CERDA: Okay. I'll pass the</p> <p>23 witness.</p> <p>24</p>
Page 267	Page 269
<p>1 MR. SNELL: People are running around like</p> <p>2 on your side, too, like all over the place.</p> <p>3 Q. (By Mr. De La Cerda) There was a</p> <p>4 discussion about trying to get -- there's a</p> <p>5 spreadsheet that has listed out some of this</p> <p>6 information and you mentioned, "Well, it might only</p> <p>7 be money that was allocated for me, but not</p> <p>8 necessarily money that I made."</p> <p>9 Do you remember discussing that? You might</p> <p>10 not have used the term --</p> <p>11 A. Yes.</p> <p>12 Q. -- "allocated."</p> <p>13 A. Yes, they did their own allocations for what</p> <p>14 they were going to spend. It was a budget, internal</p> <p>15 thing from Ethicon, a budget planning. So it could --</p> <p>16 my point is that it could say a number -- it would</p> <p>17 never be higher than that number, but it was -- it</p> <p>18 could be lower than that.</p> <p>19 Q. So the numbers in the spreadsheet may just</p> <p>20 be what would have been an allocation or a budget for</p> <p>21 you for that year and it couldn't be higher, but it</p> <p>22 might be lower?</p> <p>23 A. But it might be lower, yes. It cannot be</p> <p>24 over that number.</p>	<p>1 CROSS-EXAMINATION</p> <p>2 BY MR. SNELL:</p> <p>3 Q. Doctor, I want to go through some topics and</p> <p>4 I'm actually going to go in the order that</p> <p>5 Mr. de la Cerda covered things just to make sure we're</p> <p>6 all clear on the record here about where you intend to</p> <p>7 testify and the bases and whatnot.</p> <p>8 Do you recall at the beginning of the</p> <p>9 deposition you were asked by Mr. de la Cerda about</p> <p>10 that Abbott study where some of the patients didn't</p> <p>11 return back to the implanting surgeon for care of a</p> <p>12 complication?</p> <p>13 A. Yes.</p> <p>14 Q. All right. In formulating your opinions on</p> <p>15 the devices we've been discussing today, are there</p> <p>16 studies in databases that have captive audiences that</p> <p>17 look at treatment over time regardless of whether it's</p> <p>18 the implanter, explanter, or someone else?</p> <p>19 A. No, there's -- one of the -- one of the</p> <p>20 things that we have with these type of procedures is</p> <p>21 that there have been tracks on Medicare databases,</p> <p>22 they -- and we have other -- other -- other databases</p> <p>23 that I -- and the citations I put, the Kaiser</p> <p>24 Permanente, that's --</p>

68 (Pages 266 to 269)

Jaime Sepulveda, M.D.

Page 270	Page 272
<p>1 Q. Why don't we go there because that's what I</p> <p>2 was going to ask you about. If you turn to page 14</p> <p>3 and 15 --</p> <p>4 A. Yes, I got it.</p> <p>5 Q. -- of your TVT, TVT-O report. Do you</p> <p>6 identify different database studies that assess</p> <p>7 reoperation complication management regardless of who</p> <p>8 actually is doing that surgery?</p> <p>9 A. Right.</p> <p>10 Q. Okay.</p> <p>11 A. The Canadian registry, there is Medicare,</p> <p>12 and there's Kaiser Permanente.</p> <p>13 Q. So -- and did you find those studies to be</p> <p>14 reliable?</p> <p>15 A. That is -- that is reliable.</p> <p>16 Q. So let's take the first one that I'm looking</p> <p>17 at, it's reference No. 45 in your report, Jonsson</p> <p>18 Funk, J-o-n-s-s-o-n, Funk. It's the nine-year study</p> <p>19 where the rate of removal for mesh urethrolysis was</p> <p>20 3.7 percent.</p> <p>21 A. Yes.</p> <p>22 Q. Do you have a recollection as to whether</p> <p>23 that study contained, you know, over a 100,000</p> <p>24 patients or --</p>	<p>1 not respond to therapy, to treatment, or to the</p> <p>2 intervention.</p> <p>3 The second is that paper that you just</p> <p>4 mentioned, but the overwhelming data is so high in</p> <p>5 other areas, in other databases that we don't go by</p> <p>6 specific papers like that.</p> <p>7 Q. So the case series, can -- when you</p> <p>8 formulated your opinions, did you pay attention and</p> <p>9 put more effort -- more emphasis on higher level data?</p> <p>10 A. Not only formulate my opinions. In</p> <p>11 everything I read, I need -- I need to know what is it</p> <p>12 that I'm reading. And I put that scale, that bridge,</p> <p>13 some people see it as a pyramid, some people see it as</p> <p>14 a list. We know that case series are at the bottom,</p> <p>15 randomized control trials reviews are on the top.</p> <p>16 Q. The first study, the Jonsson Funk study, can</p> <p>17 you identify, just for the record, how many patients</p> <p>18 did that involve in the assessment?</p> <p>19 A. It's 188,454 eligible women.</p> <p>20 Q. And then the other footnotes, 46, 47, 48,</p> <p>21 and 49, were those also the different databases you</p> <p>22 mentioned?</p> <p>23 A. Right. The Canadian, the Canadian also has</p> <p>24 good reliability because the Canadian does have -- has</p>
Page 271	Page 273
<p>1 A. There was -- I know for a fact it's over</p> <p>2 80,000 patients, close to -- close to 100,000</p> <p>3 patients. Most importantly, that rate of -- of</p> <p>4 revision was about 3 percent.</p> <p>5 Q. And did you see a similar rate as to about</p> <p>6 3 percent in different database studies and other</p> <p>7 studies like the Cochrane reviews and randomized</p> <p>8 control trials?</p> <p>9 A. Consistently you go from one paper to</p> <p>10 another to another and it's 3 percent. It's 2 percent</p> <p>11 on one, 3 percent. The maximum I have seen is</p> <p>12 5 percent. But the number that is most consistently</p> <p>13 repeated is 3 percent. And that's -- that's accurate</p> <p>14 to cite to the patients.</p> <p>15 Q. So in the Abbott study, let me ask you this.</p> <p>16 Do you recall that it was a case series based on</p> <p>17 tertiary referral centers by Dr. Karram, who I think</p> <p>18 plaintiff's counsel mentioned, and a couple other</p> <p>19 doctors?</p> <p>20 A. Yes, there are probably two papers that say</p> <p>21 patients would not follow through. The first one is</p> <p>22 about the -- a review about randomized control trials</p> <p>23 or any follow up in which patients do not show up,</p> <p>24 they tend to be considered as -- in the group that did</p>	<p>1 a tracking because of their socialized system. They</p> <p>2 have tracking. They are known to be able to track a</p> <p>3 variety of conditions, and this is just another one</p> <p>4 that they -- that they are -- they report.</p> <p>5 Q. And so I guess my question is: Did you find</p> <p>6 these database studies from different databases, based</p> <p>7 on the volume of patients assessed and the</p> <p>8 methodologies, to be more reliable than a case series</p> <p>9 in a limited number of patients?</p> <p>10 A. Absolutely, besides these are up in the</p> <p>11 hierarchy.</p> <p>12 Q. You were asked some questions about what you</p> <p>13 did in formulating your opinions and you've talked</p> <p>14 about and testified that you reviewed the medical</p> <p>15 literature. I want to make sure we're clear here.</p> <p>16 Did you also look at various Ethicon company</p> <p>17 documents and evaluate them?</p> <p>18 A. Yes, I -- I -- I did. I just -- in the</p> <p>19 order -- in the order that I read them, I -- I read</p> <p>20 them most remotely. In other words, I -- it has been</p> <p>21 more time since I read than from this.</p> <p>22 Q. Did you specifically identify in your report</p> <p>23 Ethicon documents on topics that Mr. de la Cerda asked</p> <p>24 you about, like mechanical cut versus laser cut, and</p>

Jaime Sepulveda, M.D.

Page 274	Page 276
<p>1 degradation and pore size and things like that in your 2 reports?</p> <p>3 A. Well, by -- through the -- through my 4 testimony today, I address. There is no way I would 5 have been able to address it if I wouldn't have read 6 it.</p> <p>7 Q. I think you testified to this and you can 8 tell me if I'm correct or wrong.</p> <p>9 Did you earlier testify that based on all of 10 your analyses and the bases you talked about here 11 today, that you have not identified any 12 characteristics of the mesh that are a safety risk?</p> <p>13 A. Yeah, I don't -- I don't think that there 14 are concerns about safety on -- on -- on any of the 15 products that we were using. If I would have thought 16 there were concerns about safety to begin with, I 17 wouldn't have used them.</p> <p>18 Q. And besides the medical literature and the 19 high-level data that you have referenced, do you also 20 rely on your clinical experience?</p> <p>21 A. There's -- my experience is important, the 22 data is important, and the caliber of the data is 23 important. Not only that, my experience and the 24 experience of the people that I -- that I talk to.</p>	<p>1 education role, did you teach and cover the IFU with 2 other pelvic surgeons specific to these devices we 3 talked about today?</p> <p>4 A. We could -- we could make -- the answer is 5 yes. We could make any presentation and present any 6 slide, but at the end when we're working together in 7 the specimen and they collaborate, it's the IFU, the 8 one that comes out.</p> <p>9 And as a -- as a preceptor or as a teacher, 10 you need to know that IFU by -- by steps and know not 11 only what it says, but what it really says in terms of 12 mechanics. That's important for all -- all products.</p> <p>13 Q. And how many of the cadaver labs or these 14 labs that you did included covering the IFU with the 15 surgeons?</p> <p>16 A. Every single -- every single lab.</p> <p>17 Q. How many cadaver labs did you do on these 18 products? Your best estimate is fine.</p> <p>19 A. The VCS here did about six cadaver labs 20 locally. We had -- we used to go to Orlando and it 21 was very convenient for me because when I would miss 22 the plane, because I was seeing patients, I would just 23 drive up there, and it's -- and it was six in the max 24 year, maybe eight.</p>
Page 275	Page 277
<p>1 You see, it's -- in medicine, we still -- we 2 still value very much the experience, the experience 3 of our colleagues, so I use that and I use also the 4 experience of -- my own experience and the experience 5 of those that investigate. People -- people that are 6 extremely talented are looking at studies.</p> <p>7 Q. And at the end, though, in formulating your 8 opinions and coming to your final conclusions about 9 the safety and efficacy of Gynemesh PS, Prolift, TVT, 10 TVT-O, did you put more weight into the randomized 11 level on control trials than individual experience or 12 case series?</p> <p>13 A. Randomized control trial is what -- what we 14 wish we would have on everything. But once you have a 15 few randomized control trials, you can build up with 16 other -- with the other studies. You cannot just do 17 the reverse, you have to build up on the strongest 18 ones.</p> <p>19 Q. You were asked a lot of questions about your 20 opinions on IFUs and you told Mr. de la Cerda various 21 grounds and bases for your opinions and you talked 22 about how you had reviewed IFUs over many years and 23 numerous times.</p> <p>24 Let me ask you this. In your professional</p>	<p>1 Q. Would there be just one surgeon at this 2 event or would there be multiple?</p> <p>3 A. No, multiple surgeons. There was more than 4 one -- one preceptor.</p> <p>5 Q. Do you have an estimate as to the number of 6 pelvic floor surgeons you would have worked with and 7 trained and went through the IFU with?</p> <p>8 A. I never -- never saw more than four. And if 9 I will have two, that would be good. We -- we started 10 with the IFU. We would teach the device and after 11 that, one of the opportunities that we have in the 12 cadaver lab is that we could dissect and get an 13 in-depth view of what -- where the devices went by 14 using the IFU. So it was the ultimate test for an IFU 15 and the test is on performance of the procedure.</p> <p>16 Q. You were asked questions about TVT and these 17 products and you expressed the opinion that you don't 18 think that the devices rope, curl, degrade, et cetera.</p> <p>19 Did you -- so let me -- so with that 20 preface, did you look at the literature to see whether 21 any of the studies in the patients reported a 22 difference or a hypothesis as to a difference as to 23 laser cut versus mechanical cut mesh? Are there any 24 studies that describe it?</p>

70 (Pages 274 to 277)



Jaime Sepulveda, M.D.

Page 278	Page 280
<p>1 A. There is not -- there are no actual studies 2 that define one way or the other.</p> <p>3 There is actually the well-designed 4 randomized control trials, like the TOMUS, which is 5 evaluating midurethral sling, transobturator and 6 retropubic. And what -- in that specific study, which 7 is an excellent study, it's one of the pillars of what 8 we do, it's -- we -- we found out there was no 9 description of one or the other; and I have the 10 impression that both were used and there was never any 11 difference on it.</p> <p>12 Q. For the mechanical versus laser cut, do you 13 cover that in-depth in your report on pages 23 through 14 25?</p> <p>15 A. Yes.</p> <p>16 Q. Do you have -- is there a TVT-Secur report 17 over there?</p> <p>18 A. Yeah.</p> <p>19 Q. Do you recall a study by the name -- maybe 20 the first author's name was Neuman that looked at 21 TVT-O versus TVT-Secur and it reported percentages of 22 complications for erosion and dyspareunia and there 23 was a difference seen on dyspareunia which the authors 24 reported may have been to -- may have been due to</p>	<p>1 you see a study that has good science, but then it 2 becomes an opinion at the end.</p> <p>3 Q. Do you recall Mr. De al Cerda asking you 4 about a hypothetical that if laser cut mesh was three 5 times stiffer or more stiffer than mechanical cut mesh 6 would it lead to more complications and he may have 7 even mentioned exposure. Do you recall?</p> <p>8 A. Yeah, I do recall.</p> <p>9 Q. My question to you is: So in that study by 10 Neuman, did the laser cut mesh have a significantly 11 different rate of erosion than the mechanical cut 12 mesh?</p> <p>13 A. There's -- the rate of erosions were -- was 14 lower on the Secur. It was zero versus a 1.4 on the 15 TVT-O.</p> <p>16 Q. Have you found any reliable, convincing 17 clinical study evidence that, in your mind, 18 establishes that there is a significant difference in 19 laser and mechanical cut mesh when implanted with the 20 TVT devices in women?</p> <p>21 A. There has been no study up to now and, 22 obviously, I'm giving you the opinion that I will 23 welcome any study that makes a difference between -- 24 between the two of them.</p>
Page 279	Page 281
<p>1 laser cut mesh. Do you recollect that?</p> <p>2 A. That's Dr. Menahem Neuman's study. He's in 3 Israel and he study -- he studied TVT-Secur.</p> <p>4 Q. What page are you on?</p> <p>5 A. That's 44.</p> <p>6 Q. And was that the only study that you were -- 7 that you found in your investigation in the clinical 8 application of these products on women that suggested 9 there may be a difference between the two?</p> <p>10 A. There's a -- there's another -- another 11 study that Bianchi-Ferraro and on the -- both of them, 12 there are TVT-Os and TVT-Securs compared and there's 13 no difference on them. That's -- this is just -- this 14 is just illustrate that mechanical cut and laser cut, 15 unless you put it on extreme conditions, way beyond 16 the stressors that would be found on the pelvis, there 17 is no significant difference on the behavior.</p> <p>18 Q. Page 45 on the Neuman study, you wrote that 19 the authors theorized that the laser cut mesh was to 20 blame for higher dyspareunia, but there is no 21 scientific data confirming that.</p> <p>22 A. There is no scientific data and that is just 23 an opinion and that's -- that's what we -- we have to 24 define what's science, what's an opinion. Sometimes</p>	<p>1 The Cochrane database, actually, did not 2 define that. There is no other study that has defined 3 it.</p> <p>4 Q. Do you have an opinion as to whether the 5 weight, pore size, and width of the TVT mesh is proper 6 in that device for the treatment of stress urinary 7 incontinence?</p> <p>8 A. For which device specifically?</p> <p>9 Q. For the TVT, TVT-O devices, do you believe 10 that the mesh is the proper weight, pore size, and 11 width?</p> <p>12 A. Yes, and that's -- that's -- that's a mesh 13 that has the evidence behind it.</p> <p>14 Q. And when you say "the evidence," are you 15 talking about the various evidence that you put into 16 your reports?</p> <p>17 A. Yeah, we have come to the point, even the 18 communication from the FDA, most recent one, just -- 19 just speaks about the standard for continence care 20 being a midurethral sling.</p> <p>21 Q. You were asked a question by plaintiff's 22 counsel about the lighter weight mesh and larger pore 23 mesh.</p> <p>24 Has any lighter weight or larger pore mesh</p>

71 (Pages 278 to 281)

Jaime Sepulveda, M.D.

Page 282	Page 284
<p>1 been studied as much or demonstrated to be as useful</p> <p>2 and safe as the mesh in TVT for the application of</p> <p>3 stress incontinence?</p> <p>4 A. For -- for stress incontinence specifically,</p> <p>5 there is no other mesh that has been tested to the</p> <p>6 extent -- actually, there's no other continence</p> <p>7 procedure material that have been tested to the extent</p> <p>8 of TVT.</p> <p>9 Q. And is that all different types of studies</p> <p>10 or just randomized control trials?</p> <p>11 A. There are all types of studies that -- but</p> <p>12 predominantly randomized control trials as -- and</p> <p>13 we're talking about devices for urinary incontinence.</p> <p>14 Q. You were asked a lot of questions about</p> <p>15 degradation. Do you believe that the available data</p> <p>16 shows that the Prolene mesh degrades?</p> <p>17 A. No.</p> <p>18 MR. DE LA CERDA: Form.</p> <p>19 Q. (By Mr. Snell) And did you review</p> <p>20 specifically studies referenced by plaintiff's</p> <p>21 counsel and others, you went and looked for like the</p> <p>22 Clavé paper, that purportedly raised this issue of</p> <p>23 degradation?</p> <p>24 A. That is one descriptive paper in which we --</p>	<p>1 demonstrate degradation?</p> <p>2 A. No, the samples -- the samples were poorly</p> <p>3 treated to the point that they -- they were not given</p> <p>4 a good for analysis.</p> <p>5 Classically, explant -- explanted tissue --</p> <p>6 I'm sorry, explanted graft is not a good -- it's not a</p> <p>7 good sample to begin with, much less when you put it</p> <p>8 through -- through spectroscopy, spectroscopy or</p> <p>9 chromatography and much less through thermal --</p> <p>10 thermal changes.</p> <p>11 Q. Were there -- in the Clavé paper, did you</p> <p>12 see that the authors acknowledged that there was no</p> <p>13 control group to compare?</p> <p>14 A. No, that's not a control -- control study.</p> <p>15 That's barely a descriptive study.</p> <p>16 Q. Did you find any of the data that purported</p> <p>17 to raise this issue of the hypothesis degradation to</p> <p>18 be reliable?</p> <p>19 A. No, I have not seen one yet that proves</p> <p>20 degradation with any definition that I've been given</p> <p>21 of degradation.</p> <p>22 Q. Mr. de la Cerda asked you about cytotoxicity</p> <p>23 and your report -- your report, I believe, covers that</p> <p>24 pretty much in-depth.</p>
Page 283	Page 285
<p>1 we can actually look at 26 samples of low density.</p> <p>2 That's 26 samples out of close to over 2 million --</p> <p>3 between 2 million and 3 million slings that I don't</p> <p>4 think you can reliably give any opinion on that and</p> <p>5 actually, if it would degrade, I would expect it to</p> <p>6 perform worse, and that's not the evidence that we</p> <p>7 have.</p> <p>8 Q. Is there evidence, long-term data, that</p> <p>9 shows sustained durability and low complications in</p> <p>10 your view?</p> <p>11 A. Yes. There is data at five years, ten years</p> <p>12 and now I believe there is data bordering on the 15</p> <p>13 years.</p> <p>14 Q. And is that data, in your opinion,</p> <p>15 consistent or inconsistent with the degradation</p> <p>16 theory?</p> <p>17 A. No.</p> <p>18 Q. What's that?</p> <p>19 A. It's not consistent with the degradation</p> <p>20 theory. It's actually inconsistent.</p> <p>21 Q. In the Clavé study, did you see that besides</p> <p>22 the fact that a minority of the mesh is -- had this</p> <p>23 surface cracking on SEM, when they actually did the</p> <p>24 chemical analytical testing, did those tests</p>	<p>1 A. Yes.</p> <p>2 Q. And you talked with Mr. de la Cerda about</p> <p>3 the various Ethicon documents and testing you've</p> <p>4 reviewed and your opinion about the different types</p> <p>5 and what those studies show or don't show.</p> <p>6 A. Yes, I -- I reviewed the -- Ethicon actually</p> <p>7 ask a third-party lab to do it. It's a third-party</p> <p>8 lab in Germany and the reports are clear on all the</p> <p>9 assays.</p> <p>10 Q. And I think Mr. de la Cerda asked you to</p> <p>11 identify, you know, the bases for your opinion for</p> <p>12 your cytotoxicity opinions and you identified those</p> <p>13 documents in your analysis.</p> <p>14 Let me ask you this. Is the basis for your</p> <p>15 cytotoxicity opinions also your personal experience on</p> <p>16 assessing cytotoxicity issues?</p> <p>17 MR. DE LA CERDA: Leading.</p> <p>18 A. Yeah, well, I assess cytotoxicity with word</p> <p>19 in science starting to see cytotoxicity in -- in 1985,</p> <p>20 from 1985 to 1986, that's all I did in the lab. And</p> <p>21 it's -- I did that -- I actually presented it at a</p> <p>22 conference on -- on pharmaco -- on molecular</p> <p>23 pharmacology. And that's -- that's my experience with</p> <p>24 it.</p>

72 (Pages 282 to 285)

Jaime Sepulveda, M.D.

Page 286	Page 288
<p>1 Q. (By Mr. Snell) So you have personal 2 experience in cytotoxicity analyses? 3 A. I have done bench -- I have done bench work 4 on cytotoxicity. 5 Q. Did you also evaluate the clinical 6 literature on these devices to see whether they 7 documented or raised a phenomenon that you would 8 attribute to cytotoxicity? 9 A. I went through all these documents and I 10 read the results on each one of them and I -- I'm in a 11 good position to see what -- what the assays show. 12 Q. In your opinion, is the TVT mesh cytotoxic? 13 A. No. 14 Q. You were asked about clinical data that was 15 available before TVT-O -- the TVT-O device was 16 marketed. Do you recall just covering that topic with 17 Mr. de la Cerda? 18 A. Yes. 19 Q. Was there data on -- clinical data, clinical 20 studies on the TVT device before TVT-O went to market? 21 A. There was clinical data, yes. 22 Q. Is that data relevant, in your opinion, to 23 TVT-O? 24 A. Yes, it is.</p>	<p>1 A. No. And TVT has not been as to a sarcoma 2 and there is actual -- actually a publication about 3 it. 4 Q. I think in your report at page 26 you go 5 through some of the different epidemiologic studies 6 with regard to the polypropylene slings and cancer and 7 sarcoma. 8 A. On the -- 9 Q. On the -- 10 A. Which one of the reports? 11 Q. Probably be TVT, TVT-O report, page 26. 12 A. Yes. 13 Q. The top paragraph where you state: "The 14 available data does not show any causal links between 15 polypropylene and cancer," and then you have numerous 16 footnote citations. 17 A. Actually, the evidence is for lack of the 18 carcinogenic. 19 Q. And as part of Exhibit 11 there is a paper 20 by the lead author Linder where there was over 2,000 21 midurethral sling patients who were analyzed. I'll 22 just hand it to you. We'll make sure we put it back 23 into Exhibit 11. 24 A. Yes.</p>
Page 287	Page 289
<p>1 Q. Is it the same mesh? 2 A. It's the same implant. 3 Q. You were asked about the MSDS sheet that you 4 looked at for the raw polypropylene and a statement in 5 it to the effect that the raw polypropylene -- I don't 6 remember the specific, but it had something to do with 7 compatibility. 8 My question to you is this: Is the TVT 9 compatible with the female human body implanted -- 10 implantation in the pelvis for treatment of stress 11 incontinence? 12 A. It is biocompatible. It has been 13 demonstrated that it's biocompatible and it has no 14 similarity to raw polypropylene. 15 Q. That was going to be my next question. Is 16 raw polypropylene implanted in the TVT process -- TVT 17 device? 18 A. It's a -- it's a different thing. Totally 19 different -- different type of material. 20 Q. There was a discussion about sarcoma 21 formation in rats when raw polypropylene was implanted 22 in disk or powder form. Do you recall that? 23 A. Yes. 24 Q. Is TVT disk or powder form?</p>	<p>1 Q. Is that one of the studies that form the 2 basis of your opinion that the data show 3 noncarcinogenic -- 4 A. The rate of cancer in these patients was 5 reported to be below baseline. 6 Q. Have you seen any studies utilizing the 7 Prolene polypropylene in any of these devices we 8 discussed today that show a statistically significant 9 elevated risk of sarcoma formation or cancer in women 10 over and above the expected background rate? 11 A. No. 12 Q. And in that study by Linder you just 13 mentioned, is it correct that 49 of the 50 patients 14 had cancer already a baseline? 15 A. Yeah, that's -- that's the only -- it's 2 16 out of 2,474. That's what makes for .0- -- 08. 17 That's extremely low. That's actually lower than the 18 reported -- one of the cases was an ovarian cancer and 19 that's lower than the reported rate of ovarian cancer. 20 Q. Let me put that back in Exhibit 11. Make 21 sure we don't lose that. 22 You were asked questions by Mr. de la 23 Cerda -- I'm going to circle back around to the 24 lighter weight, larger pore mesh theory.</p>

73 (Pages 286 to 289)

Jaime Sepulveda, M.D.

Page 290	Page 292
<p>1 Do you know whether actually the TVM group</p> <p>2 evaluated a larger pore, lighter weight mesh in the</p> <p>3 development of what became Prolift --</p> <p>4 MR. DE LA CERDA: Leading.</p> <p>5 Q. (By Mr. Snell) -- that was besides</p> <p>6 Gynemesh PS?</p> <p>7 A. They did. They did and it's in my Reliance</p> <p>8 List. Professor Jack Tanny evaluated the IFUs of</p> <p>9 different meshes with absorbable components and with</p> <p>10 large pore size. Their first conclusion and that's</p> <p>11 non- -- the first conclusion wasn't Dr. -- Professor</p> <p>12 Berrocal, B-e-r-r-o-c-a-l.</p> <p>13 Professor Berrocal's paper in which the</p> <p>14 statement was clear the TVM group decided that no</p> <p>15 absorbable meshes were going to be used. And when a</p> <p>16 combination was used without a partial absorbable</p> <p>17 partial polypropylene, they decided that the pore size</p> <p>18 being so large did not work.</p> <p>19 Q. Did you see whether or not the surgeons</p> <p>20 evaluating the different meshes also evaluated a mesh</p> <p>21 called Vipro?</p> <p>22 A. They did. That's exactly what they did.</p> <p>23 Q. Is that a large pore, lightweight mesh as</p> <p>24 well?</p>	<p>1 Did you see any clinical studies that you</p> <p>2 found to be reliable that showed that a larger pore or</p> <p>3 lighter weight mesh than Gynemesh PS was more</p> <p>4 effective or safer than Gynemesh PS in the Prolift,</p> <p>5 Prosima or Prolapse application?</p> <p>6 A. No, it was -- it remained on a hypothesis.</p> <p>7 It remained just as a hypothesis and just we -- we all</p> <p>8 consider at one point that when we we're talking, I'm</p> <p>9 talking again about the surgeons, the word preceptors</p> <p>10 and the other surgeons, which one is going to have the</p> <p>11 longest data behind it and it was polypropylene.</p> <p>12 Q. You mentioned earlier, told Mr. de la Cerda,</p> <p>13 based on your review of the most reliable data that</p> <p>14 actually the Gynemesh PS and Prolift had a lower risk</p> <p>15 of wound complications in native tissue. Do you</p> <p>16 recall that?</p> <p>17 A. Yes.</p> <p>18 Q. And I think you also testified that based on</p> <p>19 your analysis, there was a lower rate or risk of</p> <p>20 vaginal stenosis requiring surgery for the Gynemesh PS</p> <p>21 compared to native tissue and you mentioned the Carey</p> <p>22 study?</p> <p>23 A. That is correct. That's accurate.</p> <p>24 Q. Was that the same Carey study we were</p>
Page 291	Page 293
<p>1 A. Yeah, it's a large -- large pore. You can</p> <p>2 get pores as high as 5-, 6,000 microns.</p> <p>3 Q. Did that mesh demonstrate better efficacy or</p> <p>4 tolerability than the Gynemesh PS?</p> <p>5 A. No, actually it was -- the performance was</p> <p>6 worse.</p> <p>7 Q. You've heard of the mesh Ultrapro,</p> <p>8 obviously. Mr. de la Cerda talked to you today about</p> <p>9 presentations concerning the potential benefits of</p> <p>10 lighter weight or larger pore meshes.</p> <p>11 A. Yes.</p> <p>12 Q. Does the Ultrapro mesh also have a risk of</p> <p>13 mesh exposure?</p> <p>14 A. We had -- when we say "we," as the surgeons</p> <p>15 doing these procedures, we expected that it was going</p> <p>16 to be less mesh exposure. We actually found that it</p> <p>17 was exactly the same.</p> <p>18 Q. And same thing for dyspareunia or pain?</p> <p>19 A. Yes.</p> <p>20 Q. In your Prolift report -- do you have that</p> <p>21 handy? Let's go to page 10 and 11.</p> <p>22 A. Yes.</p> <p>23 Q. Before we actually get to that, let me ask</p> <p>24 you this.</p>	<p>1 looking at earlier?</p> <p>2 A. Yes.</p> <p>3 Q. Do you know where that is? I want to ask</p> <p>4 you a question about it.</p> <p>5 A. That is in the --</p> <p>6 Q. My question is: Do you have it over there</p> <p>7 somewhere? I just want to ask you a question about</p> <p>8 it.</p> <p>9 Oh, here it is.</p> <p>10 A. It is the paper before the last one on the</p> <p>11 top to the left.</p> <p>12 Q. So page 1384, does that report and what you</p> <p>13 referenced in that randomized control trial that there</p> <p>14 was a higher rate of reoperation for vaginal stenosis</p> <p>15 in native tissue compared to the mesh?</p> <p>16 A. That's correct.</p> <p>17 Q. Do you remember Mr. de la Cerda asked you</p> <p>18 did Ethicon ever test the pliability of the mesh?</p> <p>19 A. Yes, I do recall that.</p> <p>20 Q. Now, pliability of the mesh, I think you</p> <p>21 told Mr. de la Cerda, that that could be related to</p> <p>22 stenosis or pain.</p> <p>23 A. Well, it's -- one thing is that the</p> <p>24 pliability and the other thing is about the</p>

74 (Pages 290 to 293)

Jaime Sepulveda, M.D.

Page 294	Page 296
<p>1 contraction or shrinkage and what we were talking was</p> <p>2 along the lines of what mesh contraction or mesh can</p> <p>3 increase the pliability. Pliability of a tissue or</p> <p>4 the elasticity of the tissue has more to do with the</p> <p>5 tissue itself.</p> <p>6 Now, the question is, if the mesh could add</p> <p>7 to this and the answer is every clinical indication of</p> <p>8 shrinkage or -- or elasticity does not hold the test</p> <p>9 of clinical evaluation. If there would be a</p> <p>10 shrinkage, there would be an actual contraction. The</p> <p>11 vagina would be shorter. And there is no -- there's</p> <p>12 no study that demonstrates that the vagina is shorter</p> <p>13 on this -- on all patients that have been repaired</p> <p>14 with mesh.</p> <p>15 We have had instances in which the vagina is</p> <p>16 shorter with native tissue repair because there's no</p> <p>17 augmentation with the mesh. So -- and that</p> <p>18 communication is not just on my opinion, that's part</p> <p>19 of the communication that was sent to the FDA.</p> <p>20 Q. Are you talking about the paper that was</p> <p>21 endorsed by hundreds of pelvic surgeons?</p> <p>22 A. Yes.</p> <p>23 Q. At page 10 and 11 of your report you talk</p> <p>24 about the Cochrane review and then the randomized</p>	<p>1 Q. Is that a high-level of evidence, a</p> <p>2 systematic review metanalysis?</p> <p>3 A. That is at the highest level.</p> <p>4 Q. And is that what your opinions are based</p> <p>5 upon?</p> <p>6 A. Yes.</p> <p>7 Q. You were asked questions by Mr. de la Cerda</p> <p>8 about characterization of mesh as high risk or low</p> <p>9 risk, and I think you basically disagreed and said you</p> <p>10 prefer to kind of evaluate it on its own terms. Is</p> <p>11 that correct or not?</p> <p>12 A. I -- I saw the classification of low risk or</p> <p>13 high risk to be restrictive and the question is if</p> <p>14 this -- if this procedure is done with mesh have a</p> <p>15 higher risk over native tissue repairs.</p> <p>16 Q. Did he -- I'm sorry, go ahead.</p> <p>17 A. And the answer to that is every time we look</p> <p>18 at that randomized control trial, the answer to that</p> <p>19 is no.</p> <p>20 Q. So my question is this: Have you put in</p> <p>21 your report and will you be prepared to discuss at</p> <p>22 trial how Prolift, Prosima, Gynemesh PS comparing</p> <p>23 risk, whether it's less risky or higher risk than</p> <p>24 native tissue repair for things that we talked about</p>
Page 295	Page 297
<p>1 control data do not show a statistically significant</p> <p>2 difference in de novo dyspareunia, de novo pelvic</p> <p>3 pain, vaginal pain, change in sexual function, or</p> <p>4 change in vaginal length or vaginal caliber.</p> <p>5 A. That's the latest Cochrane review, that's</p> <p>6 exactly what it demonstrates.</p> <p>7 Q. And did you also assess the randomized</p> <p>8 control trials to see if that was an accurate</p> <p>9 statement, specifically for Gynemesh PS and Prolift?</p> <p>10 A. Yeah, there's a -- there's an actual --</p> <p>11 there's a -- there are randomized control trials and</p> <p>12 there is the Lowman paper in which mesh is placed</p> <p>13 transabdominally, sacrospinously on fixations,</p> <p>14 uterosacral suspensions, anterior/posterior repairs,</p> <p>15 they were all evaluated for the incidence of</p> <p>16 dyspareunia.</p> <p>17 Q. You mention that the urine analysis was</p> <p>18 consistent with the findings by Dietz and Maher, who</p> <p>19 did a systematic review and found no difference in</p> <p>20 post-operative or de novo dyspareunia or change in</p> <p>21 sexual function. Do you see that?</p> <p>22 A. Yes.</p> <p>23 Q. And that citation is number 24?</p> <p>24 A. 24.</p>	<p>1 today with Mr. de la Cerda like recurrence, wound</p> <p>2 complications, pain, change in vaginal shape, length,</p> <p>3 things like that?</p> <p>4 MR. DE LA CERDA: Form.</p> <p>5 A. Surgery has risk. Surgery has multiple</p> <p>6 risk. Surgery for prolapse has specialized risk that</p> <p>7 we face every single time that we work with mesh or</p> <p>8 without mesh. We haven't had a mesh now for a few</p> <p>9 years and patients still having the same kind of</p> <p>10 complications that they had with the exception of a</p> <p>11 mesh exposure because there's no mesh.</p> <p>12 Incisions still dehiscence the same way,</p> <p>13 incisions still separate, challenges of wound healing</p> <p>14 are still seen, granulation tissue is still seen, and</p> <p>15 actually what we're seeing now is a higher rate of</p> <p>16 hysterectomies with -- with shorter vaginas.</p> <p>17 Q. (By Mr. Snell) Do you plan to discuss at</p> <p>18 trial how the rates and risks with the Gynemesh PS,</p> <p>19 Prolift, Prosima compare to the rates and risks with</p> <p>20 native tissue?</p> <p>21 MR. DE LA CERDA: Form.</p> <p>22 A. Yes.</p> <p>23 Q. (By Mr. Snell) For example, in your</p> <p>24 report, you -- so for your Prolift report, page 9,</p>

75 (Pages 294 to 297)



Jaime Sepulveda, M.D.

<p style="text-align: right;">Page 298</p> <p>1 you have -- you have multiple studies that show the</p> <p>2 efficacy of Prolift and Gynemesh PS compared to</p> <p>3 native tissue. Do you see that?</p> <p>4 A. Yes.</p> <p>5 Q. Do you plan to talk about the different</p> <p>6 rates and risks of recurrence for mesh-based repair,</p> <p>7 particularly I'm focused on Ethicon Gynemesh PS and</p> <p>8 Prolift, Prosima compared to native tissue.</p> <p>9 MR. DE LA CERDA: Form.</p> <p>10 A. Yes.</p> <p>11 Q. (By Mr. Snell) And do you plan to discuss</p> <p>12 rates of wound complications, sexual function and</p> <p>13 dyspareunia for Ethicon's meshes compared to native</p> <p>14 tissue?</p> <p>15 MR. DE LA CERDA: Form.</p> <p>16 A. Yes, I plan -- I plan to testify on those.</p> <p>17 Q. (By Mr. Snell) And have you evaluated and</p> <p>18 investigated those issues?</p> <p>19 A. I have thoroughly evaluated. I have -- I</p> <p>20 run randomized control trial after randomized control</p> <p>21 trial. I have highlighted the areas that I feel are</p> <p>22 most important and I have summarized them today on</p> <p>23 my -- on my testimony.</p> <p>24 Q. And have you also identified those --</p>	<p style="text-align: right;">Page 300</p> <p>1</p> <p>2 CERTIFICATE OF OATH</p> <p>3</p> <p>4 STATE OF FLORIDA )</p> <p>5 COUNTY OF BROWARD )</p> <p>6</p> <p>7 I, JODY L. WARREN, Registered Professional</p> <p>8 Reporter, Florida Professional Reporter, Notary</p> <p>9 Public in and for the State of Florida at Large,</p> <p>10 certify that the witness, JAIME SEPULVEDA, M.D.,</p> <p>11 personally appeared before me on 3/30/16 and was</p> <p>12 duly sworn by me.</p> <p>13 DATED this 11th day of April, 2016.</p> <p>14</p> <p>15</p> <p>16</p> <hr/> <p>17 JODY L. WARREN, RPR, FPR</p> <p>18 Notary Public, State of Florida at Large</p> <p>19 My Commission Expires 2/28/19</p> <p>20 My Commission No. FF 188650</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p>
<p style="text-align: right;">Page 299</p> <p>1 examples of those data in your reports, as well?</p> <p>2 A. I am -- I am ready to go on presented on the</p> <p>3 numbers.</p> <p>4 Q. Lastly, Mr. de la Cerda asked you about if</p> <p>5 you had any plans for further work in the formulation</p> <p>6 or analysis. Obviously, you're being deposed today</p> <p>7 and tomorrow and I will represent to you that there</p> <p>8 are transcripts not yet available for plaintiffs'</p> <p>9 experts and some of plaintiffs' experts are not being</p> <p>10 deposed until even after you.</p> <p>11 Do you plan to review those transcripts when</p> <p>12 they're provided to you and assess them?</p> <p>13 A. I will -- I will evaluate them. I'll assess</p> <p>14 them, and I'm looking forward to see the scientific</p> <p>15 validity of it.</p> <p>16 MR. SNELL: Okay. That's all I have.</p> <p>17 MR. DE LA CERDA: Nothing further from me.</p> <p>18 MR. SNELL: Thank you.</p> <p>19 THE COURT REPORTER: Do either of you need a</p> <p>20 rough draft on this?</p> <p>21 MR. SPARKS: Yeah, I put my email on --</p> <p>22 MR. DE LA CERDA: Yeah, I'll take one, too.</p> <p>23 (Thereupon, the taking of the deposition</p> <p>24 was concluded at 4:33 p.m. )</p>	<p style="text-align: right;">Page 301</p> <p>1 CERTIFICATE OF REPORTER</p> <p>2</p> <p>3 I, JODY L. WARREN, Registered Professional</p> <p>4 Reporter, Florida Professional Reporter, certify</p> <p>5 that I was authorized to and did stenographically</p> <p>6 report the deposition of JAIME SEPULVEDA, M.D., the</p> <p>7 witness herein on 3/30/16; that a review of the</p> <p>8 transcript was requested; that the foregoing pages</p> <p>9 are a true and complete record of my stenographic</p> <p>10 notes of the deposition by said witness.</p> <p>11 I further certify that I am not a relative,</p> <p>12 employee, attorney, or counsel of any of the</p> <p>13 parties, nor am I a relative or employee of any of</p> <p>14 the parties' attorney or counsel connected with the</p> <p>15 action, nor am I financially interested in the</p> <p>16 action.</p> <p>17 DATED this 11th day of April, 2016.</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <hr/> <p>22 JODY L. WARREN, RPR, FPR</p> <p>23 Notary Public, State of Florida at Large</p> <p>24</p>

76 (Pages 298 to 301)

Jaime Sepulveda, M.D.

Page 302	Page 304
<div style="text-align: center;"> <p>1       - - - - -</p> <p>2       E R R A T A</p> <p>3       - - - - -</p> </div> <p>4   PAGE LINE CHANGE</p> <p>5   _____</p> <p>6   REASON: _____</p> <p>7   _____</p> <p>8   REASON: _____</p> <p>9   _____</p> <p>10 REASON: _____</p> <p>11 _____</p> <p>12 REASON: _____</p> <p>13 _____</p> <p>14 REASON: _____</p> <p>15 _____</p> <p>16 REASON: _____</p> <p>17 _____</p> <p>18 REASON: _____</p> <p>19 _____</p> <p>20 REASON: _____</p> <p>21 _____</p> <p>22 REASON: _____</p> <p>23 _____</p> <p>24 REASON: _____</p>	<div style="text-align: center;"> <p>1       LAWYER'S NOTES</p> <p>2   PAGE LINE</p> </div> <p>3   _____</p> <p>4   _____</p> <p>5   _____</p> <p>6   _____</p> <p>7   _____</p> <p>8   _____</p> <p>9   _____</p> <p>10 _____</p> <p>11 _____</p> <p>12 _____</p> <p>13 _____</p> <p>14 _____</p> <p>15 _____</p> <p>16 _____</p> <p>17 _____</p> <p>18 _____</p> <p>19 _____</p> <p>20 _____</p> <p>21 _____</p> <p>22 _____</p> <p>23 _____</p> <p>24 _____</p>
<div style="text-align: right; padding-bottom: 10px;">Page 303</div> <p>1</p> <p>2       ACKNOWLEDGMENT OF DEPONENT</p> <p>3</p> <p>4       I, _____, do</p> <p>5 hereby certify that I have read the</p> <p>6 foregoing pages, and that the same is</p> <p>7 a correct transcription of the answers</p> <p>8 given by me to the questions therein</p> <p>9 propounded, except for the corrections or</p> <p>10 changes in form or substance, if any,</p> <p>11 noted in the attached Errata Sheet.</p> <p>12</p> <p>13</p> <p>14 _____</p> <p>15 JAIME SEPULVEDA, M.D.       DATE</p> <p>16</p> <p>17</p> <p>18 Subscribed and sworn</p> <p>19 to before me this</p> <p>20 _____ day of _____, 20____.</p> <p>21 My commission expires: _____</p> <p>22 _____</p> <p>23 Notary Public</p> <p>24</p>	

77 (Pages 302 to 304)

Jaime Sepulveda, M.D.

Page 305

<b>A</b>	204:8,15 205:3	<b>addressing</b> 143:19	245:14,18,20	<b>amount</b> 10:15
<b>abbott</b> 29:13,15,15	<b>acknowledged</b>	143:21 178:9	246:6,10,10,14,24	153:8 180:14,15
31:24 269:10	284:12	<b>adequate</b> 237:11	249:6,6,15 253:2	190:16 259:5,7
271:15	<b>acknowledgment</b>	<b>adjust</b> 150:22	262:12,14,24	<b>amounts</b> 197:8
<b>abbrevo</b> 76:22	303:2	151:7 220:7	263:11,15 265:8	<b>ams</b> 72:18,19
<b>abdominal</b> 89:2	<b>acog</b> 44:14 47:23	226:10,10 265:16	<b>agreeing</b> 194:1	<b>analyses</b> 274:10
90:11 173:23	<b>acquire</b> 206:12	<b>adjustments</b>	<b>agreement</b> 169:5	286:2
239:5	<b>acquired</b> 101:14	218:22	<b>ahead</b> 27:8 28:8	<b>analysis</b> 106:17
<b>abdominally</b> 246:6	<b>acted</b> 7:17,21 8:7	<b>advantage</b> 23:6	30:1 33:14 48:13	251:5 284:4
<b>ability</b> 150:22	8:17 22:4 32:6	<b>adverse</b> 64:18	70:14,23 116:8	285:13 292:19
151:7 268:17	33:4	124:1	117:22 136:7	295:17 299:6
<b>able</b> 16:20 82:12	<b>acting</b> 16:4 32:5	<b>advice</b> 112:5	144:5 148:7	<b>analytical</b> 283:24
92:13 102:3	<b>action</b> 10:20 158:23	<b>affairs</b> 213:8,9	151:12 153:5	<b>analyze</b> 115:7
107:14 122:22	215:24 301:15,16	<b>affect</b> 171:18	159:17 160:8	135:1
126:5,12 127:2,3	<b>active</b> 22:1 237:11	180:17	167:17 169:18	<b>analyzed</b> 288:21
131:22 145:2	<b>actual</b> 40:22,23	<b>agarose</b> 180:8,8,9	170:20 178:5	<b>analyzing</b> 134:23
171:19 180:3	41:6 69:12 90:8	180:20 182:18	184:16 187:10	<b>anatomies</b> 17:20
243:10 273:2	95:19 157:14	183:8,11	188:2 205:20	<b>anatomy</b> 14:2,13
274:5	169:24 171:24	<b>agent</b> 179:11	208:22 214:8	17:2,3,20 18:5,16
<b>abnormal</b> 170:1,6	173:11 174:2	181:18	222:4 239:13	19:5 25:1 153:10
170:9,21 172:17	183:22 200:21	<b>agents</b> 181:13	249:11 250:17	<b>anecdotal</b> 31:13,15
173:12	202:12 203:15	<b>ago</b> 8:12 57:20	252:5 256:4 263:5	31:16 138:6
<b>absence</b> 139:20	226:20,21 278:1	87:13 189:11	263:20 296:16	<b>anesthesia</b> 87:22
<b>absolutely</b> 23:11	288:2 294:10	<b>agree</b> 31:10,13 38:9	<b>ahmed</b> 46:24,24	<b>anesthetic</b> 265:9
60:8 268:18	295:10	60:6 75:6 78:6,19	<b>air</b> 171:1 172:18	<b>angle</b> 191:20
273:10	<b>acute</b> 186:11,11	105:7,8 109:6	<b>al</b> 5:21 280:3	<b>animals</b> 199:8
<b>absorbable</b> 159:20	187:2	111:13 113:2,16	<b>alfreda</b> 1:15	<b>ans</b> 145:17
208:11 290:9,15	<b>adams</b> 1:9	114:2 126:5,11	<b>ali</b> 46:24,24	<b>answer</b> 6:5,5 26:7
290:16	<b>add</b> 65:17 294:6	141:2 144:21	<b>allen</b> 2:3	116:2,5,14 118:8
<b>absorbables</b> 159:20	<b>added</b> 62:6 65:16	150:21 151:5,8,13	<b>allocated</b> 157:14	143:14 145:18
<b>absorbed</b> 158:22	245:8	151:14,16,22	267:7,12 268:6	147:6 153:5 155:8
215:23	<b>addition</b> 20:5	152:3,5 153:6,10	<b>allocation</b> 267:20	165:4 170:19
<b>absorbers</b> 226:4,6	198:18	153:12 154:10	<b>allocations</b> 267:13	182:22 188:18,19
226:9	<b>additional</b> 39:10	155:1 158:4 165:6	<b>allow</b> 6:4,5 111:24	203:5 205:5
<b>accept</b> 165:6	51:1,2 52:1 58:21	168:21 178:17	207:13	207:21 210:13,21
<b>accurate</b> 55:10	58:22 65:14	181:22 182:3,8	<b>allows</b> 98:24 99:3	227:6 231:18
57:19 85:2 93:16	120:19 139:5,5	189:24 190:9,11	115:7 116:18	239:22 241:15
94:3 113:8 128:20	<b>address</b> 53:5	190:14 191:9,15	178:11	276:4 294:7
131:23 154:21	108:15 125:16,16	192:18 193:6,10	<b>alternative</b> 133:9,9	296:17,18
163:16 179:14	127:2,4,6,14	203:22 204:21	133:11 134:20	<b>answered</b> 78:23
189:21 207:5	128:9 274:4,5	205:16 207:6	261:5,14	117:17 118:9
230:17 231:18	<b>addressed</b> 124:23	222:15 224:6,18	<b>alters</b> 121:4	126:15 127:11,21
249:14 271:13	134:7 179:1 198:6	225:15 227:2,14	<b>alza</b> 32:8,11,14,14	152:24 153:4
292:23 295:8	238:10	229:19 230:9	32:21 33:5	155:5 177:10
<b>accurately</b> 216:19	<b>addresses</b> 108:23	236:7,24 240:13	<b>american</b> 33:22	214:7 228:12
<b>achieve</b> 203:24	127:23	244:21,22 245:7	125:1	253:19,21 262:17

263:9,18 268:16 <b>answers</b> 8:24 303:7 <b>anterior</b> 88:24 89:8 131:10 295:14 <b>anticholinergic</b> 32:12 <b>anticipate</b> 64:13 <b>antioxidants</b> 171:12 <b>anybody</b> 64:2 119:5 <b>anymore</b> 15:18 19:10 28:17,18 244:16 <b>anyway</b> 150:13 253:19,21 254:5 <b>apical</b> 91:19,19,21 91:21 <b>apologize</b> 120:11 135:8 <b>apparently</b> 68:6 <b>appear</b> 54:19 55:6 55:15 <b>appearances</b> 2:1 <b>appeared</b> 300:10 <b>appendectomy</b> 250:22 <b>application</b> 211:22 216:9,9 279:8 282:2 292:5 <b>applications</b> 131:21 <b>applied</b> 123:8 186:18 <b>apply</b> 14:3 80:4 123:12 <b>appreciate</b> 108:3 241:1 <b>appreciation</b> 91:2 <b>apprize</b> 123:2 <b>approach</b> 18:4 99:10 101:24 190:22,23 208:7 <b>appropriate</b> 141:24 <b>approval</b> 105:8 231:2 233:6	<b>approximate</b> 34:9 60:24 <b>approximately</b> 8:10 15:14 16:1 21:14 32:23 60:22 61:21,22 62:19,23 76:14 84:16 92:7 231:13 <b>approximation</b> 21:22 <b>april</b> 300:12 301:17 <b>area</b> 33:7 79:2,4 82:16 83:11,22,24 86:2 92:20 93:9 93:10 123:17 127:23 143:19 201:8,21 <b>areas</b> 81:10,11 272:5 298:21 <b>arena</b> 185:9 225:21 <b>arrested</b> 10:23 <b>art</b> 152:1 <b>article</b> 4:5 51:14,16 51:18,19 52:19 <b>articles</b> 38:19 48:11 65:14,20 202:16 <b>arts</b> 71:24 <b>aside</b> 97:21 <b>asked</b> 78:23 86:11 95:9 102:17 117:17 118:9 126:14 127:11,21 152:24 153:3 155:4 177:10 214:7 228:12 262:17 263:9,18 269:9 273:12,23 275:19 277:16 281:21 282:14 284:22 285:10 286:14 287:3 289:22 293:17 296:7 299:4 <b>asking</b> 179:16 213:12 219:1 257:17 280:3	<b>aspect</b> 175:22 <b>aspects</b> 165:2 195:12 <b>assay</b> 197:5 <b>assays</b> 100:22,22 103:13 180:19 181:11 182:17 183:4 198:23,24 285:9 286:11 <b>asserted</b> 198:3 <b>assess</b> 151:1 270:6 285:18 295:7 299:12,13 <b>assessed</b> 273:7 <b>assessing</b> 285:16 <b>assessment</b> 179:23 182:13 272:18 <b>assignment</b> 56:22 <b>associated</b> 109:8,18 110:5,16,20 111:15 113:4,19 116:22 126:2,21 127:9 244:23 262:16 263:1,7 <b>assume</b> 6:15 8:23 22:16 50:5 76:8 147:9 257:21 <b>assumed</b> 166:7 <b>assumes</b> 78:24,24 <b>atrophy</b> 265:2 <b>attached</b> 303:11 <b>attachment</b> 138:3 <b>attention</b> 69:23 71:7 96:16 272:8 <b>attitude</b> 27:24 <b>attorney</b> 301:12,14 <b>attorneys</b> 5:21 <b>attracted</b> 191:3 207:16 <b>attractive</b> 91:20 190:23 <b>attribute</b> 196:6 286:8 <b>attributes</b> 140:19 <b>audiences</b> 269:16 <b>augmentation</b>	294:17 <b>augmented</b> 89:4 223:23 224:22 228:2,15 <b>august</b> 26:11 27:2 <b>austin</b> 23:1 <b>author</b> 29:15 45:13 46:5 97:14 257:2 288:20 <b>authoritative</b> 253:3 253:7 <b>authorized</b> 301:5 <b>authors</b> 29:16 46:5 278:20,23 279:19 284:12 <b>autoimmune</b> 265:2 <b>autologous</b> 75:11 <b>available</b> 41:21 42:1 53:8 89:23 90:1,3 183:4 199:1 242:21 282:15 286:15 288:14 299:8 <b>average</b> 105:20 <b>avoided</b> 240:10 <b>avoiding</b> 83:20 <b>aware</b> 25:23 26:8 28:14 29:22 101:23,24 103:23 122:17,19 123:14 123:23 124:5 130:1 135:20 136:1 144:6 145:13 146:13 147:18 148:2,5,8 157:23 158:5,20 160:19 165:18 166:7,11,12 168:6 168:10,12,14 174:11 179:23 189:19 194:15,23 194:24 196:24 197:9 198:7 200:2 200:11,12 201:9 201:15 203:8,16 207:22 213:3,19	213:20 214:19 216:7,11,21 217:3 218:6,14,15 227:1 227:9,11 231:5 232:22 233:13,14 240:9 247:11 251:10 252:14 253:15 256:21 259:17 260:16 261:5,13,18,19 262:15,15 <hr/> <b>B</b> <hr/> <b>b</b> 2:14 <b>back</b> 19:23 26:21 27:4 30:11 31:5 31:12 32:5 42:13 42:19 43:2 45:2 55:23 56:5 69:21 69:23 96:14,17 101:1 120:14,24 125:9 143:24 155:23 162:2,4 163:11 175:15 177:21 184:23 199:24 206:20,22 206:24 208:16 212:2 221:6 227:13 236:22 242:19 257:23 266:16 268:20 269:11 288:22 289:20,23 <b>backed</b> 118:6,10 191:1 <b>background</b> 124:18 289:10 <b>backtracking</b> 207:11 <b>bad</b> 75:20,22 119:14 221:4 242:23 243:2 <b>balance</b> 63:11 <b>balanced</b> 129:7,10 <b>ballpark</b> 92:10 <b>baptist</b> 71:23
---	---	---	--	--

<b>barbara</b> 1:10	143:18 185:16,17	221:8,9,10 238:7	<b>biocompatibility</b>	<b>body</b> 17:21 78:7,20
<b>barely</b> 284:15	187:1 190:7 262:1	291:9	184:22	78:21,22 79:1
<b>base</b> 66:5 190:24	279:17	<b>bennett</b> 1:8	<b>biocompatible</b>	115:19 143:18
<b>based</b> 15:11 16:11	<b>belief</b> 98:12 170:14	<b>berrocal</b> 290:12,12	287:12,13	159:7 160:21
57:22 58:2 78:17	174:18	<b>berrocals</b> 290:13	<b>biofilm</b> 170:22,22	161:13 163:22,23
90:20 92:5 119:17	<b>believe</b> 24:17 27:11	<b>best</b> 17:7,24 18:3	171:10 172:7,9	171:13 175:8
120:21 127:24	44:11 90:8 98:11	19:13 21:24 28:20	200:6	177:2,24 186:5,9
135:15 140:13	110:15 116:24	31:13 37:12 53:24	<b>biologic</b> 75:8,16	190:2,15,17
145:7 153:9	119:23 128:7	74:14 111:6	76:3	191:11 196:22
161:18 171:8	149:10 150:18	112:19 114:16,16	<b>biologicals</b> 89:4	197:3 263:13
194:4 197:21	160:22 161:3	117:23 156:14	<b>biomaterials</b> 46:21	264:18 287:9
206:14 223:3	165:14 166:5	188:4 191:18	102:16	<b>bone</b> 173:1
224:1 262:10	168:16,17 169:22	212:20 268:17	<b>biomechanical</b>	<b>book</b> 3:16,18,20
271:16 273:6	171:3,14 172:5	276:18	102:15 161:1	35:3 36:5,11
274:9 292:13,18	176:5,11,21 186:8	<b>beth</b> 1:10	185:16,17 230:15	40:23 41:1 45:10
296:4	194:3,8 195:5	<b>better</b> 64:23 73:10	230:16	45:15,20,22 46:4
<b>baseline</b> 289:5,14	200:6 202:6	75:2,3,4 78:7,17	<b>biomechanically</b>	46:10,14,20 47:2
<b>bases</b> 146:7 183:14	204:17 206:3	99:2,4 113:9	186:15	47:6,11
269:7 274:10	207:17 212:4	115:7 132:16	<b>biomechanics</b> 3:16	<b>books</b> 35:2,22 36:6
275:21 285:11	218:4 219:4	143:13 206:19	3:18,20 35:2	36:10 37:1 45:8
<b>basically</b> 42:22	221:23 223:9	219:2 221:12,16	45:11 46:4,15	98:10
74:14 198:15	226:18 243:8,8	221:17 223:17,19	151:4 214:12	<b>bordering</b> 283:12
243:23 296:9	247:2 250:24	229:16 242:17	<b>biomedical</b> 46:21	<b>borderline</b> 80:23
<b>basis</b> 19:4 98:12	254:13 255:18,19	252:1,12 266:24	97:22 98:1,3,5,8,9	<b>boston</b> 23:2 33:22
105:22 106:3,7	255:20 257:9	291:3	98:13,18,23	<b>bothering</b> 87:19
139:4,6,19 146:8	259:2,12 260:18	<b>beyond</b> 15:18 18:16	<b>biopsy</b> 181:21	<b>bottom</b> 215:12
177:8 183:1,15	260:23 261:6	18:16 83:1,4,22	<b>biscayne</b> 1:23	272:14
195:23 196:1	262:3,5,8,9 264:4	83:24 98:15 103:5	<b>bit</b> 48:7 71:21	<b>bouncing</b> 226:6,7
198:1 200:17	264:15 281:9	136:9,10 141:16	107:1 135:18	<b>bowel</b> 21:6 170:11
203:5 205:21	282:15 283:12	164:23 191:21	203:21 210:5	<b>boxes</b> 104:11
229:8 239:21	284:23	279:15	214:18 230:22	<b>brand</b> 72:17 75:14
240:16 246:11	<b>believed</b> 24:8 30:3	<b>bianchiferraro</b>	236:6 251:20	<b>break</b> 6:18,19,21
248:4 252:6	94:23 95:5,12	50:14,17,21,22	<b>bladder</b> 21:5 32:19	55:21,22 61:8,9
285:14 289:2	168:2 259:15	52:8 53:12 279:11	55:22 170:11	96:9 155:13
<b>bathroom</b> 266:8	261:14	<b>bias</b> 207:7 258:15	<b>blame</b> 279:20	177:16 215:2
<b>beach</b> 1:24	<b>believes</b> 170:17	258:22 259:3	<b>blind</b> 142:24,24	266:6,9
<b>beaumont</b> 2:7	<b>bell</b> 166:19 167:3	<b>biased</b> 260:20,22	<b>blinded</b> 204:2	<b>breakdown</b> 76:18
<b>began</b> 14:18	<b>bells</b> 189:15	<b>biases</b> 205:6,9,12	<b>block</b> 61:19	<b>breaking</b> 141:17
<b>beginning</b> 15:13,14	<b>bench</b> 286:3,3	<b>big</b> 213:6	<b>blood</b> 21:7 166:13	176:6
269:8	<b>benchedup</b> 142:22	<b>bigger</b> 221:2	166:21	<b>breaks</b> 251:21
<b>behalf</b> 2:2,10 8:17	<b>benchmark</b> 179:11	<b>biggest</b> 153:14	<b>blvd</b> 1:23	<b>bridge</b> 272:12
20:2 28:3 150:4	252:7	180:18 224:14	<b>board</b> 10:21 13:3	<b>bridging</b> 192:12,13
<b>behave</b> 142:5	<b>benefit</b> 83:4 91:7	<b>bill</b> 61:1,19	<b>boardcertified</b>	192:19 193:2,15
185:22,23 186:18	92:19 245:9	<b>billed</b> 59:11	30:13	193:20,24 194:2
186:21	<b>benefits</b> 129:8	<b>billing</b> 64:13	<b>bob</b> 27:11,13	194:11
<b>behavior</b> 139:18	220:12,15,18,19	<b>binders</b> 40:7 48:11	<b>boca</b> 30:14	<b>brief</b> 161:24



<b>briefly</b> 13:9 156:3 201:18	<b>butlersnow</b> 2:14	<b>car</b> 226:4,8	<b>catheters</b> 170:23	44:5,13,19,22
<b>bring</b> 25:16 37:12 37:12 66:1 74:4 92:20 150:8 166:6 207:10 210:12 215:10 217:19	<b>buy</b> 207:16	<b>carcinogenic</b> 288:18	<b>cathy</b> 1:19	45:5,19 46:3,20
<b>brings</b> 218:22 250:9	<b>buying</b> 207:14	<b>carcinoma</b> 51:11 201:21 202:3	<b>causal</b> 288:14	47:5,21 48:4,6,7
<b>brittle</b> 176:12,13 176:17,18,18,20 176:22	<b>C</b>	<b>carcinomas</b> 203:1	<b>cause</b> 78:21 83:12 142:4 144:12 193:15 199:8 224:6,9,19 261:6 261:15 265:1	49:3,10,18,21 50:2,11 51:3,8,15 52:10,18 53:1,15 53:20 54:15,22 55:1,6,13,19,24 56:4 57:13 58:4 59:10,21 60:5,14 60:21 66:6 67:10 67:15,19 68:6,18 68:22 69:5,20 70:16,24 71:6 77:24 78:18 79:10 82:18 88:6 89:24 92:23 96:14 101:6 104:22 107:20 108:4,16,24 109:15 110:1,23 111:20 112:21 114:2,10,21 115:15 116:2,20 118:1,13,21 120:18 121:20 126:11,18 127:7 127:15 128:1,14 129:5,12,23 133:6 135:6,17 136:12 139:3 140:23 142:6,17 144:8 145:4 146:6 147:8 147:18 148:10 150:3 151:5,16,22 152:23 153:6,16 154:23 155:8,17 155:23 156:9,15 156:22 157:9,12 157:16,19 159:12 160:3,11 161:20 162:8,16 163:18 165:8 166:20,23 167:2,9,19 170:5 171:2 173:17 176:11 177:8,15 177:20 178:13
<b>broad</b> 187:11	<b>cadaver</b> 18:21 19:6 19:7,10,16,17 75:11 211:8 276:13,17,19 277:12	<b>care</b> 23:5 80:2,21 81:9,12 89:14,20 89:22 90:5,13,16 124:10 154:21 190:7 191:2 195:13 208:14,14 269:11 281:19	<b>caused</b> 95:5 129:17	
<b>brochure</b> 232:5	<b>cadavers</b> 14:2 15:6 19:1 155:7	<b>career</b> 14:13 81:17 92:7 95:22 96:1,6 124:11,15 249:20	<b>causes</b> 190:1 197:11 199:12,12 200:14	
<b>broke</b> 86:9,17	<b>calculating</b> 207:3	<b>carey</b> 133:23 256:15 259:5,13 259:16 292:21,24	<b>causing</b> 94:23 95:12 170:14 192:20 202:2	
<b>broken</b> 61:11,13	<b>caliber</b> 185:19 261:2 274:22 295:4	<b>carrie</b> 1:12	<b>caution</b> 257:15	
<b>brother</b> 168:9	<b>calibration</b> 151:23 152:6,17,19,20 153:1	<b>cart</b> 244:15,16	<b>cavness</b> 11:17,19 12:8 157:8 268:3 268:4	
<b>brought</b> 13:2 26:6 34:13,15,16 35:2 35:22 36:2,19 37:5,9 38:12 39:18,20,23 41:6 41:11,15 46:3,20 47:14 48:8 66:6,9 67:2,17 70:17 71:2,17 98:10 201:16,23 208:6	<b>california</b> 23:4	<b>case</b> 7:24 8:1,3,8 9:8,19,20 10:1,3,5 11:3,4,19,24 12:8 12:8,8,9 30:3 35:8 35:18 41:5 51:11 53:9 56:23 58:12 59:2,16 60:18 62:8 116:16 138:6 141:19 156:5,5 164:10 176:10 201:17,20,24 202:12,13,14 260:23 271:16 272:7,14 273:8 275:12	<b>cd</b> 42:2,5 <b>cds</b> 42:4,20	
<b>broward</b> 300:4	<b>call</b> 17:16 134:10 137:19 160:22 200:4	<b>cases</b> 7:7,9,13,18 8:13 9:16 10:10 10:17 11:12,21 12:7,10 25:19,19 38:1 62:9 289:18	<b>cell</b> 51:11 100:22 179:21 180:1 201:21 202:3	
<b>budget</b> 267:14,15 267:20	<b>called</b> 40:24 45:10 46:21 162:10,11 240:1 290:21	<b>casespecific</b> 35:17 37:9,24 47:13 50:11 58:24 62:21 63:1,5,9	<b>cells</b> 3:18,20 46:5 179:10 180:13 181:4,15,16	
<b>build</b> 275:15,17	<b>calling</b> 256:12	<b>category</b> 39:12	<b>cellular</b> 164:20,20 197:14 221:11	
<b>burch</b> 72:7,21,23 73:2,7,10,17,21 73:24 74:2,8,16 74:20 79:22 80:1 80:4,6,10 81:14 178:22 188:17	<b>calls</b> 212:7 222:18 241:13,16		<b>center</b> 2:12 33:2 71:24 77:12,14	
<b>burches</b> 73:1 164:5	<b>cambridge</b> 46:8		<b>centers</b> 271:17	
<b>burn</b> 42:20	<b>canadian</b> 270:11 272:23,23,24		<b>centimeter</b> 82:23	
<b>burt</b> 2:14 37:17 56:16 63:22 153:2 156:8 157:17	<b>cancer</b> 199:8,13,20 201:11,15,17 202:9,18,19 288:6 288:15 289:4,9,14 289:18,19		<b>centimeters</b> 78:4,4 149:17 150:5 152:19	
<b>business</b> 13:13 35:13 242:1,3	<b>cant</b> 19:9 67:7 94:1 103:3,3 113:22 162:1 175:9 205:4 250:3 263:24		<b>cerda</b> 2:3,5 3:4 5:9 5:20,21 11:18 15:1 20:7 21:21 22:15 26:7 27:13 28:1,19 29:5 30:4 35:16,19 37:15,24 38:8,13,16 39:4,6 40:11,15 41:9,13 41:24 42:7,21 43:3,6,11,16,21	
<b>busy</b> 95:2 251:18	<b>capabilities</b> 136:9 192:2			
<b>butler</b> 2:11 8:13	<b>capability</b> 132:23			
	<b>captive</b> 269:16			

Jaime Sepulveda, M.D.

Page 309

179:6,22 182:8,22 184:23 185:10 187:15 188:5 189:24 190:9 191:9,22 193:5,21 194:22 195:18 197:2,23 199:19 200:19 204:21 205:4,11,24 206:8 208:16 209:1,21 210:13 211:1 212:13 214:15 215:3,8,18,19 216:2,21 217:5 218:13,24 220:11 222:10,20 224:13 226:22 228:5 229:7 231:11,19 232:12,17,23 233:7,14,18 234:11 235:24 236:4,5,17,24 237:6 239:14,23 240:7,14 241:17 243:18 246:21 247:16 248:6 250:2 251:4 252:14 254:13 255:13 256:15,23 257:23 259:24 260:13,24 261:12 261:22 262:11,24 263:8,11,24 264:3 264:8,17 266:5,10 266:15,23 267:3 268:22 269:5,9 273:23 275:20 280:3 282:18 284:22 285:2,10 285:17 286:17 289:23 290:4 291:8 292:12 293:17,21 296:7 297:1,4,21 298:9 298:15 299:4,17 299:22	<b>certain</b> 17:17 19:9 39:17 57:4 81:10 105:14 123:14 144:18 179:14 205:18 209:15 228:20 <b>certainly</b> 31:21 114:21 226:13 <b>certainty</b> 79:7 137:17 <b>certificate</b> 3:6,6 300:2 301:1 <b>certify</b> 300:9 301:4 301:11 303:5 <b>cetera</b> 277:18 <b>chain</b> 102:10 191:18 <b>chair</b> 86:17 213:6 <b>challenge</b> 105:9 179:2 <b>challenges</b> 153:14 297:13 <b>chance</b> 115:18 190:20 256:2 268:1 <b>change</b> 15:9 153:23 160:16 194:3 268:20 295:3,4,20 297:2 302:4 <b>changed</b> 14:9,9 15:11 16:7,10,11 16:11 59:8 90:8 122:17 208:13 239:2,3,17 240:8 <b>changes</b> 153:13 284:10 303:10 <b>chapter</b> 3:17,19,21 36:15 45:16,21,21 46:13,16,17 47:9 <b>chapters</b> 36:5,16 45:14 46:9 47:6 <b>characteristic</b> 108:18 159:9 163:20 200:8 <b>characteristics</b> 108:6 127:17	128:5,9 160:5 163:4 274:12 <b>characterization</b> 296:8 <b>characterize</b> 84:6 158:13,15 <b>charlene</b> 1:8 <b>charleston</b> 1:2 <b>check</b> 33:18 48:5 183:12 212:2 226:9 233:23 <b>checked</b> 38:6 <b>chemical</b> 106:12 283:24 <b>chemicals</b> 105:13 <b>chemistry</b> 105:12 106:8 <b>choice</b> 252:9 <b>choking</b> 86:16 <b>choose</b> 77:12 88:19 <b>chordoma</b> 9:9,10 9:10,20 <b>chromatography</b> 198:23 284:9 <b>chronic</b> 186:12 199:19 264:18 265:5,5,7 <b>cigarette</b> 174:4 <b>circle</b> 289:23 <b>circumferential</b> 99:21 <b>circumstance</b> 86:21 <b>circumstances</b> 76:3 136:14 147:11 254:15 264:4 <b>citation</b> 295:23 <b>citations</b> 37:22 269:23 288:16 <b>cite</b> 168:11 271:14 <b>cited</b> 35:7 38:18,20 38:21,22,22 39:2 39:2,3 40:10 47:15 48:23 <b>cites</b> 132:4 <b>cities</b> 23:1 <b>city</b> 30:22	<b>claims</b> 209:24 <b>clarification</b> 47:22 166:16 <b>clarify</b> 84:3 109:23 162:5 <b>clarifying</b> 157:13 <b>class</b> 24:2 105:3 <b>classically</b> 284:5 <b>classification</b> 104:1 104:8 105:1 120:22 251:1,13 296:12 <b>classifications</b> 103:24 104:5,15 <b>classified</b> 104:24 105:6 <b>classify</b> 189:17,20 250:23 <b>clavé</b> 168:6 282:22 283:21 284:11 <b>clavés</b> 168:8 <b>clean</b> 239:22 <b>clear</b> 6:10 27:15,19 51:11 107:14 157:17 201:20 202:3 215:17 236:18 243:24 245:14 248:14,14 255:9 266:18 269:6 273:15 285:8 290:14 <b>clearance</b> 90:9 211:22 212:22,22 231:2,14 233:10 234:3,8,14,22 235:12 239:12 <b>cleared</b> 213:1 231:5 231:20 232:14,19 233:1,3 234:6,16 234:18 <b>clearly</b> 205:10 <b>clinga</b> 187:16 <b>clinic</b> 30:18 <b>clinical</b> 29:2 74:20 74:20 75:2,4 91:2 113:15 114:16	117:9,23 118:20 119:18 130:20 139:14,17,18 142:16 145:17 158:19 170:2,4 172:15,19 173:11 177:13 178:6 185:9 186:23,24 190:7 196:6 205:17,18 206:4 211:1,21 212:15 213:1,15,17,17,19 214:2,5 242:24 246:12,12 259:6 274:20 279:7 280:17 286:5,14 286:19,19,21 292:1 294:7,9 <b>clinically</b> 75:1 108:14,19 110:24 111:1,2,16 140:8 140:8 142:9 146:24 147:6,10 147:14,14 151:21 164:8 169:2,14,14 172:20 177:24,24 178:14,15,19 185:4 196:4 200:8 227:2,14 <b>clinics</b> 30:18 <b>clip</b> 52:23 <b>close</b> 13:7 151:2 152:7 251:23 271:2,2 283:2 <b>closed</b> 54:8 <b>closterhofen</b> 187:16 <b>coauthor</b> 97:14 <b>cochrane</b> 271:7 281:1 294:24 295:5 <b>cohort</b> 116:16 133:5 134:11 238:6 252:10 255:12 <b>collaborate</b> 276:7
--	---	--	--	--

Jaime Sepulveda, M.D.

Page 310

<b>collagenous</b> 192:21	30:12,15 31:3	146:23 200:15	124:17 125:13	228:6 290:10,11
<b>colleagues</b> 24:21	113:12,14 149:19	<b>compartment</b> 91:6	126:2,7 127:19	<b>conclusions</b> 187:22
30:8 31:15 275:3	154:15	91:6	130:21 133:14,14	188:3 260:7 275:8
<b>college</b> 125:1	<b>communicated</b>	<b>compartments</b>	134:4,12,13	<b>condition</b> 19:16
<b>collins</b> 1:7	117:15 118:4	219:10	144:23 184:4,12	20:11 109:4
<b>color</b> 42:18	248:20	<b>compatibility</b>	185:1,14 200:14	<b>conditions</b> 174:6
<b>colporrhaphies</b>	<b>communication</b>	287:7	218:18 238:9	265:1,3 273:3
89:9	26:13 30:16	<b>compatible</b> 287:9	244:22 246:8	279:15
<b>colporrhaphy</b>	114:17,18 229:5	<b>compelled</b> 242:7,9	261:7,15 263:16	<b>cone</b> 1:14
131:10 253:5	240:22 243:23,24	<b>compensated</b> 98:4	264:1,5 278:22	<b>conference</b> 17:2
<b>com</b> 2:5,9,14	244:2 250:7	205:22	280:6 283:9	28:10 285:22
<b>combination</b>	281:18 294:18,19	<b>compensation</b> 24:2	292:15 297:2,10	<b>confidential</b> 10:8
290:16	<b>communications</b>	156:4 266:19	298:12	11:16
<b>come</b> 23:7 29:10	124:24 136:22	<b>complaint</b> 94:7	<b>complied</b> 238:12	<b>confidentiality</b>
30:11 31:3,5,12	<b>community</b> 30:11	<b>complaints</b> 13:1	<b>comply</b> 127:2	10:9
55:23 69:6,21	31:18	<b>complete</b> 32:2 70:4	240:10 241:7	<b>configures</b> 181:14
79:5 82:9 94:21	<b>companies</b> 33:4,11	70:9 71:11 126:24	<b>complying</b> 241:23	<b>confirm</b> 167:18
95:10 112:20	33:13,23 34:3	127:1 128:24	<b>components</b> 290:9	<b>confirmation</b>
116:13 155:7	<b>company</b> 32:7 34:1	129:3,3 193:20	<b>composition</b> 158:2	143:22
170:1 179:3	34:8 97:5 117:6	231:10 301:9	158:8,10 162:20	<b>confirmed</b> 223:4
200:21 213:10	154:11 155:2,10	<b>completed</b> 54:8	162:23 163:6,12	<b>confirming</b> 145:7
225:23 241:5	180:4 183:5	58:9,11	<b>comprehensive</b>	279:21
281:17	209:13,13 210:6	<b>completely</b> 27:9	124:9 128:4	<b>confuse</b> 146:20
<b>comes</b> 73:14 75:18	210:15 212:10,11	151:15 164:16,18	154:20 262:21	<b>connected</b> 301:14
78:7 79:17,19	214:2 220:2	172:1 247:11,11	<b>computer</b> 34:20	<b>connection</b> 99:12
83:9 85:12 105:17	241:24 254:4,14	<b>complex</b> 17:20	68:15	99:23
132:21 213:22,22	255:5,18 273:16	<b>compli</b> 261:7	<b>con</b> 15:15	<b>consensus</b> 31:20
214:13,17 226:2	<b>companys</b> 254:2,22	<b>compliance</b> 34:15	<b>concentrate</b> 57:11	102:23 153:7
247:12,13,14	255:1	<b>compliant</b> 225:17	<b>concept</b> 150:7	254:1,21
276:8	<b>comparable</b> 253:4	<b>complicated</b> 91:12	164:3,21 165:5,6	<b>consent</b> 82:3,4
<b>comfort</b> 78:11,14	<b>compare</b> 132:18,24	127:5 187:13	194:11,12,13	107:12 108:20,23
<b>comfortable</b> 79:16	134:1 185:15	230:17	196:3 223:24	110:17 111:24
<b>coming</b> 58:19,24	250:20,21 284:13	<b>complication</b> 29:19	<b>concepts</b> 224:2	112:6,23 117:16
59:5 86:10 156:22	297:19	30:22 116:23	<b>concern</b> 26:23 27:3	118:5
181:16 184:20	<b>compared</b> 129:23	118:24 120:19	228:17	<b>consented</b> 112:22
275:8	133:8 134:15	121:3 128:11	<b>concerning</b> 291:9	<b>consequences</b>
<b>commentary</b> 59:8	136:14 143:5	129:14,16 178:14	<b>concerns</b> 228:7	177:13
<b>commission</b> 300:17	187:23 245:9	178:16 218:20	274:14,16	<b>consider</b> 81:8 98:2
300:18 303:20	246:8 279:12	264:9,13 269:12	<b>conclude</b> 131:16	98:21 115:5
<b>commit</b> 193:24	292:21 293:15	270:7	192:24 193:1	119:19 120:8,18
<b>committee</b> 44:14	298:2,8,13	<b>complications</b> 69:4	222:5 227:9	121:3 135:2
237:14 240:19	<b>comparing</b> 4:5	69:21 81:6 108:8	<b>concluded</b> 186:15	148:13 188:24
<b>common</b> 24:11	52:20 144:1 203:9	109:17 110:5	220:4 299:24	199:2,3 292:8
111:9 150:14	228:1 296:22	111:14 113:18	<b>conclusion</b> 161:17	<b>considerations</b>
191:1	<b>comparison</b> 138:19	114:6,13 116:22	193:14 202:2,4	18:15 222:8,9
<b>communicate</b>	140:6 145:23	117:15 118:15	216:12,22 225:23	223:12 242:4

Jaime Sepulveda, M.D.

Page 311

<b>considered</b> 70:18 71:18 81:12 106:16 115:2 120:22,23 189:23 211:17 254:19 256:6 271:24 <b>consistent</b> 15:8 18:8 174:24 175:1 176:3 283:15,19 295:18 <b>consistently</b> 133:4 139:2,11 174:17 199:12 206:19 271:9,12 <b>constant</b> 175:4 <b>constructed</b> 157:24 158:7 <b>consult</b> 15:18 <b>consultant</b> 13:10 13:12,15,18,24 14:18,21 15:9,15 15:16,20 16:4,7 19:24 20:2 21:9 21:15,23 22:4 32:5,6,20 33:4 156:2 252:18 266:20 <b>consultants</b> 16:24 23:20 194:16 252:15 254:2 255:17 <b>consultation</b> 26:22 28:3 <b>consulting</b> 27:4 33:10,24 <b>contacted</b> 56:7 <b>contained</b> 270:23 <b>containers</b> 171:20 171:21,24 203:14 <b>contains</b> 48:22 52:1 <b>contemplated</b> 13:11 <b>content</b> 17:10 121:12,15,18 <b>contents</b> 122:15,19 <b>context</b> 57:5 161:10	194:13 253:7 <b>continence</b> 150:2 154:19,20 208:8 208:13,14 249:17 281:19 282:6 <b>continent</b> 192:9 <b>continue</b> 15:16 55:20 103:5 228:16 240:17 248:19 <b>continued</b> 202:17 248:21,23 <b>contract</b> 220:8,8 <b>contraction</b> 191:11 193:15 217:9,12 217:12,17,19 218:1,21 294:1,2 294:10 <b>contractions</b> 218:16 224:20 <b>contracture</b> 217:6 217:22 218:8,17 219:3 224:6,8,18 225:10 <b>contradict</b> 121:15 121:21 <b>contralateral</b> 91:6 <b>control</b> 97:12 108:2 108:2 116:15,16 116:16,24 117:13 117:19 118:16 119:15,17 130:10 130:13,15,17 132:21,22 134:8 134:11 135:4 139:23,24 140:18 142:19,21 178:8 180:19 243:15 246:19 271:8,22 272:15 275:11,13 275:15 278:4 282:10,12 284:13 284:14,14 293:13 295:1,8,11 296:18 298:20,20 <b>controlled</b> 4:5	52:20 57:11 74:12 <b>convenient</b> 276:21 <b>conversation</b> 109:2 <b>conversations</b> 148:9 <b>convey</b> 237:15 <b>conveyed</b> 242:10 <b>convicted</b> 10:23 <b>convince</b> 87:17 <b>convincing</b> 83:15 280:16 <b>copied</b> 42:9 <b>copies</b> 35:23 37:21 42:18 49:24 59:13 60:1 <b>copy</b> 34:17 38:3 42:8,10,23,24 43:1,10 45:21 46:16 47:10 53:3 54:19 55:7,16,18 68:20 156:7 215:10 <b>copying</b> 35:20 <b>correct</b> 5:16 7:1,2 8:18,19 9:17 12:11,12 13:15 20:9 21:15 26:12 37:6 41:17 43:24 44:3,4 47:16,17 48:23 49:6,14 50:7 54:19 55:7 55:10,16,18 56:21 61:22 68:10 70:2 70:3,12,15 71:9 72:2,6,10,22 73:15 74:17,20 88:21 97:23 106:5 108:8 121:16 128:16,20,24 136:17 153:24 158:3,9,14 160:13 160:21 162:20 180:2 196:19 197:12 200:15 203:24 204:24 215:1 227:7 233:6	238:18,23 239:7 240:11 248:1 265:22 274:8 289:13 292:23 293:16 296:11 303:7 <b>corrected</b> 54:4,10 <b>correcting</b> 74:16 <b>correction</b> 188:6,21 236:20 237:4 <b>corrections</b> 303:9 <b>correlate</b> 22:13 147:5 <b>correlation</b> 171:6 <b>correspond</b> 40:14 <b>correspondence</b> 233:9,19 234:13 <b>corroborate</b> 145:2 <b>corroborated</b> 119:7 <b>cosson</b> 259:18,19 259:20,21 260:6 260:14 <b>cost</b> 238:12,14 <b>costly</b> 238:15 <b>cough</b> 137:11 <b>couldnt</b> 244:17 267:21 <b>counsel</b> 61:13 63:24 65:8,9,15 73:20 91:15 117:18 135:13 170:16 271:18 281:22 282:21 301:12,14 <b>counseling</b> 108:10 108:10 116:19 118:11,18,20 <b>count</b> 118:22,24 <b>counted</b> 22:5 76:16 <b>country</b> 124:18 <b>county</b> 300:4 <b>couple</b> 6:2 86:24 96:18 97:7 147:22 233:15 271:18 <b>course</b> 6:18 22:10 23:13,19 24:22	52:5 53:2 96:23 116:3 207:22 216:3 219:13 <b>courses</b> 96:19 <b>court</b> 1:1 35:20 42:10,16 50:15 57:7 67:13 166:22 210:9 211:6 230:1 236:13 299:19 <b>courteous</b> 232:7 <b>cover</b> 42:4,19 150:20 276:1 278:13 <b>covered</b> 23:13 269:5 <b>covering</b> 276:14 286:16 <b>covers</b> 154:8 284:23 <b>cracking</b> 165:22 167:11,13,24 168:1,2 169:10,11 171:4,7 172:6 200:3 283:23 <b>craig</b> 46:6 <b>create</b> 164:22,23 207:7 <b>created</b> 170:22 <b>creation</b> 186:13 191:20 <b>credentialing</b> 249:22,23 <b>crime</b> 10:24 <b>criminal</b> 12:21,24 <b>critical</b> 80:8,10 <b>criticism</b> 25:15 <b>criticisms</b> 25:24 26:8 <b>criticize</b> 80:5,16 213:5 <b>criticized</b> 25:12 <b>cross</b> 3:4 <b>crossexamination</b> 269:1 <b>crude</b> 87:6 <b>crystallinity</b> 163:2
---	---	---	--	--

Jaime Sepulveda, M.D.

Page 312

163:15,15 198:23 <b>cultures</b> 100:22 <b>curl</b> 136:5,16 138:11,21 140:7 277:18 <b>curled</b> 137:6 138:4 <b>curling</b> 141:9 142:8 <b>curls</b> 139:8 142:1 <b>current</b> 53:21 54:1 54:2 75:2,4 <b>currently</b> 58:15 71:22 72:1 104:24 <b>curriculum</b> 4:8 53:22 <b>cut</b> 27:9 57:10 79:18,18,19,20 82:1 88:11,12 135:21,22,23,24 135:24 136:2,3,14 136:15 138:10,18 138:19 140:5,6 141:7,7 143:5,6 144:1,2,8,20,21 145:10,11,22,24 146:9,10,12,12,22 146:24 148:3,4 153:19,19 154:6,6 273:24,24 277:23 277:23 278:12 279:1,14,14,19 280:4,5,10,11,19 <b>cuts</b> 138:16 <b>cv</b> 34:16 53:3,17 54:9 96:17 <b>cystocele</b> 131:12 132:2 <b>cystoceles</b> 253:13 <b>cytometry</b> 181:10 <b>cytotoxic</b> 181:6,17 181:20 182:20 286:12 <b>cytotoxicity</b> 100:21 179:8,17,23 180:6 180:10,18,24 181:4,11 182:13 182:14 183:4	284:22 285:12,15 285:16,18,19 286:2,4,8 <hr/> <b>D</b> <hr/> <b>d</b> 1:21 3:2 5:1,4 300:9 301:6 303:15 <b>dallas</b> 2:4 23:1 30:23 <b>damage</b> 229:24 <b>damper</b> 226:11 <b>danger</b> 117:3 <b>dangerous</b> 134:19 135:5 189:5 <b>data</b> 68:24 69:1,3 69:21 70:18 71:18 73:12 108:13 121:11 125:8 127:24 134:24 148:14,15 196:13 196:14,17 202:15 224:5 228:20 237:9 259:6,9,16 260:5,20 265:21 272:4,9 274:19,22 274:22 279:21,22 282:15 283:8,11 283:12,14 284:16 286:14,19,19,21 286:22 288:14 289:2 292:11,13 295:1 299:1 <b>database</b> 270:6 271:6 273:6 281:1 <b>databases</b> 269:16 269:21,22 272:5 272:21 273:6 <b>date</b> 68:10 303:15 <b>dated</b> 300:12 301:17 <b>dates</b> 231:9,10 234:19 <b>davila</b> 226:18 <b>day</b> 14:7 113:10 181:11 300:12	301:17 303:19 <b>days</b> 134:24 135:1 <b>de</b> 2:3,5 3:4 5:9,20 5:21 11:18 15:1 20:7 21:21 22:15 26:7 27:13 28:1 28:19 29:5 30:4 35:16,19 37:15,24 38:8,13,16 39:4,6 40:11,15 41:9,13 41:24 42:7,21 43:3,6,11,16,21 44:5,13,19,22 45:5,19 46:3,20 47:5,21 48:4,6,7 49:3,10,18,21 50:2,11 51:3,8,15 52:10,18 53:1,15 53:20 54:15,22 55:1,6,13,19,24 56:4 57:13 58:4 59:10,21 60:5,14 60:21 66:6 67:10 67:15,19 68:6,18 68:22 69:5,20 70:16,24 71:6 77:24 78:18 79:10 82:18 88:6 89:24 92:23 96:14 101:6 104:22 107:20 108:4,16,24 109:15 110:1,23 111:20 112:21 114:2,10,21 115:15 116:2,20 118:1,13,21 120:18 121:20 126:11,18 127:7 127:15 128:1,14 129:5,12,23 133:6 135:6,17 136:12 139:3 140:23 142:6,17 144:8 145:4 146:6 147:8 147:18 148:10 150:3 151:5,16,22	152:23 153:6,16 154:23 155:8,17 155:23 156:9,15 156:22 157:9,12 157:16,19 159:12 160:3,11 161:20 162:8,16 163:18 165:8 166:20,23 167:2,9,19 170:5 171:2 173:17 176:11 177:8,15 177:20 178:13 179:6,22 182:8,22 184:23 185:10 187:15 188:5 189:24 190:9 191:9,22 193:5,21 194:22 195:18 197:2,23 199:19 200:19 204:21 205:4,11,24 206:8 208:16 209:1,21 210:13 211:1,11 211:12,15,17,21 212:13 214:15 215:3,8,18,19 216:2,21 217:5 218:13,24 220:11 222:10,20 224:13 226:22 228:5 229:7 231:11,19 232:12,17,23 233:7,14,18 234:11 235:24 236:4,5,17,24 237:6 239:14,23 240:7,14 241:17 243:18 246:21 247:16 248:6 250:2 251:4 252:14 254:13 255:13 256:15,23 257:23 259:24 260:13,24 261:12 261:22 262:11,24 263:8,11,24 264:3	264:8,17 266:5,10 266:15,23 267:3 268:22 269:5,9 273:23 275:20 280:3 282:18 284:22 285:2,10 285:17 286:17 289:22 290:4 291:8 292:12 293:17,21 295:2,2 295:20 296:7 297:1,4,21 298:9 298:15 299:4,17 299:22 <b>deal</b> 50:12 66:16 <b>deborah</b> 1:6 <b>decide</b> 77:14 112:7 112:12 213:7 228:23 229:6 248:7 249:24 <b>decided</b> 26:11 27:2 27:18 78:3 238:16 238:21 241:2,20 290:14,17 <b>decides</b> 107:3 <b>deciding</b> 112:6 123:24 <b>decision</b> 23:3 26:18 73:24 112:9,9,20 113:5,15 114:18 117:10,23 213:3 237:12 247:3 <b>decisions</b> 254:12 <b>decommercializa...</b> 240:1 244:9 <b>decommercialized</b> 15:24 244:12 249:3 <b>decrease</b> 224:21 <b>decreased</b> 176:19 <b>dedicated</b> 63:11 <b>dedication</b> 98:20 <b>deep</b> 99:10 <b>defect</b> 91:7 <b>defects</b> 91:19,21 173:21
---	--	---	--	---



<b>defend</b> 210:17	177:2,23 277:18	48:21 49:11 50:4	<b>deteriorating</b> 121:9	277:13,18 280:20
<b>defendant</b> 2:10	283:5	50:23 52:6,15	<b>determination</b>	281:9 282:13
9:20	<b>degraded</b> 106:19	53:17 54:16 55:3	112:1	286:6 289:7
<b>defense</b> 7:22,23 8:7	165:23	55:15 61:13 63:16	<b>determine</b> 81:13	<b>devote</b> 106:10
12:1,11 61:12	<b>degrades</b> 106:13	63:17 64:4 139:16	106:13,18 125:11	<b>devoted</b> 98:14
<b>defer</b> 22:10,17,19	282:16	156:20 189:8	154:11 155:2	106:10
<b>define</b> 141:2 163:15	<b>degrading</b> 165:22	251:3 269:9	186:19 200:3,7,13	<b>diameter</b> 184:20
165:9 167:20	168:3 176:5	299:23 301:6,10	201:10 251:6	<b>didnt</b> 15:1 20:17
176:13 199:15	<b>degree</b> 91:5 98:7	<b>depositions</b> 7:3,4	<b>determined</b> 237:10	37:11 76:5 82:1
225:20,21,22	102:16 115:4	7:13 35:9 39:23	<b>detrol</b> 34:5,6	86:8 91:21 97:14
278:2 279:24	<b>degrees</b> 252:17	58:23,24 59:5,6	<b>develop</b> 230:9	106:6 150:11
281:2	<b>dehisce</b> 264:23	62:10	251:18	166:6 188:8,12
<b>defined</b> 14:20,23	297:12	<b>dermis</b> 75:11	<b>developed</b> 18:17	192:23 208:11
164:15 177:11	<b>dehiscence</b> 173:2,3	<b>descending</b> 82:16	219:23 229:20	210:1,1 215:10
197:13 281:2	182:2	<b>describe</b> 74:23	<b>developing</b> 61:24	217:17 219:17
<b>defines</b> 164:13	<b>delaware</b> 2:7	110:6 138:5 140:2	<b>development</b> 16:16	225:20,21 227:10
<b>definitely</b> 31:14	<b>delineated</b> 238:9	202:17 277:24	100:17 229:23	227:11 232:13
38:10 40:21 79:7	<b>deliver</b> 207:17	<b>described</b> 110:5	290:3	233:8 235:23
96:2 118:2 175:23	<b>delivery</b> 8:9 11:20	134:18 141:16	<b>deviated</b> 207:20	239:19 241:6,18
<b>definition</b> 168:21	12:2,10	145:18 152:2	<b>deviates</b> 178:7	266:1 269:10
179:13,15 284:20	<b>delorme</b> 211:12,13	159:23 192:23	<b>deviations</b> 259:13	<b>dietz</b> 295:18
<b>deformation</b> 226:1	<b>demonstrate</b> 284:1	265:18	<b>device</b> 32:7 33:3,11	<b>difference</b> 29:11
<b>degradation</b>	291:3	<b>description</b> 15:2	92:13 99:6,7,16	148:16,17 183:19
106:20,22 141:8	<b>demonstrated</b>	126:6 183:21	99:19 100:15	183:20 184:24
158:23 159:5,15	133:4 139:1	278:9	101:1 103:10	185:7,13 186:6
159:18,19 160:20	144:14 185:5	<b>descriptive</b> 282:24	124:13 127:23	187:1,3 277:22,22
160:23,24,24	227:23 282:1	284:15	138:8 141:17	278:11,23 279:9
161:1,2,4,7,18	287:13	<b>design</b> 98:22 99:4	148:19 154:11,12	279:13,17 280:18
163:21 164:4,11	<b>demonstrates</b>	99:16,17 100:2,13	155:1,3,10 207:14	280:23 295:2,19
164:13 165:5,10	294:12 295:6	102:4,12 103:7,10	210:6,15 214:2	<b>differences</b> 129:24
165:24 167:8,14	<b>demonstrating</b>	105:13 143:20	226:17,19 230:24	130:2 141:7
167:20,22 168:11	25:10 28:18	204:3,10,22	231:1 232:1,2	<b>different</b> 14:11,24
168:22,23 169:5,9	<b>density</b> 183:21	213:19	247:3 249:8,18	19:14 20:6 29:3
169:13,23 170:14	283:1	<b>designated</b> 11:21	254:1,3,5,21,23	30:22 48:14 51:21
170:17 171:16	<b>department</b> 12:18	<b>designed</b> 99:5	255:1,2 256:14	61:17 81:7,7
172:7 177:7,11,22	12:18,20 189:12	100:1 101:3 159:7	262:20 263:7,10	100:18,18,18
178:9 200:4	<b>dependent</b> 19:16	159:13	263:12,22,23	101:15,17 102:17
215:24 274:1	19:19,20 31:2	<b>designing</b> 100:8	277:10 281:6,8	102:18,23,24,24
282:15,23 283:15	140:17	226:17	286:15,20 287:17	103:13 104:8,13
283:19 284:1,17	<b>depending</b> 11:15	<b>desirable</b> 159:6	<b>devices</b> 98:22 99:22	104:14,20,20,21
284:20,21	<b>deponent</b> 303:2	160:4	100:3,4,5 103:22	104:21 109:16
<b>degrade</b> 136:4	<b>depos</b> 8:20,22	<b>desire</b> 203:24 204:8	104:1,2,3,5 105:6	110:4 117:9
138:20 140:6	<b>deposed</b> 299:6,10	204:11,14	116:10 126:21	119:21 120:1
160:5 161:12,15	<b>deposition</b> 1:21 6:2	<b>destefanoraston</b>	242:21 243:20	125:3,3 135:13
163:21,23 164:4	6:24 7:7,10 9:24	1:14	250:14 251:7	148:17 164:17,18
164:22 171:12	10:5,6 11:6,13	<b>destroyed</b> 244:18	269:15 276:2	164:19,20,21

Jaime Sepulveda, M.D.

Page 314

171:20,21 172:1 179:1 181:13,15 185:17,17,19 192:5 195:12 199:15,16,18 206:2 208:14 220:22,22 222:8,9 228:1 260:11 262:4 270:6 271:6 272:21 273:6 280:11 282:9 285:4 287:18,19 287:19 288:5 290:9,20 298:5 <b>differentiating</b> 133:17 <b>differently</b> 146:11 185:22,23 186:18 186:21 <b>difficult</b> 91:11 <b>difficulty</b> 85:18 <b>diffusion</b> 183:8 <b>digging</b> 83:11 <b>dimensions</b> 138:8 <b>dina</b> 1:8,14 <b>dindo</b> 251:13 <b>direct</b> 3:4 5:8 96:16 <b>directing</b> 69:23 71:7 <b>directly</b> 40:10 51:22 134:6 <b>director</b> 77:14 <b>disagree</b> 126:13,16 135:9,14,14 145:5 145:6 151:9 182:3 187:6,21 189:3,6 189:7 190:1,10,11 190:14 191:10 192:18 193:7,10 193:22 194:7 195:14 237:5,7,8 245:4,5,12,18,19 245:24 246:22,24 252:23 253:1,2,6 253:13,20 <b>disagreed</b> 296:9	<b>disagreeing</b> 194:1 240:16 <b>disagreement</b> 246:11 <b>discharge</b> 94:8 <b>disciplinary</b> 10:20 <b>disclose</b> 110:13 117:20,22 <b>disclosed</b> 10:15 11:11,13 107:22 108:20 109:20 110:17,22 124:6 <b>discomfort</b> 225:12 <b>discovered</b> 118:14 147:10 <b>discrepancies</b> 54:23 <b>discuss</b> 69:5,22 150:4,12 157:20 167:22 185:12 296:21 297:17 298:11 <b>discussed</b> 11:2 56:17 71:2 156:2 156:3 168:4 238:17 289:8 <b>discusses</b> 196:7 <b>discussing</b> 28:2,5 172:6 267:9 269:15 <b>discussion</b> 59:23 161:24 167:23 195:1 202:7 221:1 266:20 267:4 287:20 <b>discussions</b> 29:17 <b>disk</b> 198:15,15,24 202:24 287:22,24 <b>disks</b> 198:9 <b>disorder</b> 173:3 <b>disorders</b> 173:5 174:3 265:2 <b>dissect</b> 14:2 17:6,6 92:16,20 277:12 <b>dissecting</b> 14:10 15:6 17:9,19 93:9	137:21 <b>dissection</b> 14:3 17:7 19:21 93:21 <b>dissolve</b> 161:15,16 <b>district</b> 1:1,1,5 <b>ditropan</b> 32:16,17 <b>division</b> 1:2 100:24 <b>doctor</b> 5:10 28:10 43:2 56:4 71:6 80:5 86:15 96:16 112:4,18 115:5 177:20 213:13 215:8,20 233:2 234:3 247:3,17,23 255:14,14 266:15 269:3 <b>doctors</b> 12:22 18:22 20:13 23:7 24:23 25:17 26:1 28:2,6 29:11,12 30:15 93:15 102:15 110:12 112:5 116:5 123:2 124:17 125:11 126:1 146:18 175:6 195:6 219:19 232:13 234:23 235:14 254:24 255:23 271:19 <b>document</b> 1:5 <b>documentation</b> 22:6 <b>documented</b> 286:7 <b>documents</b> 39:21 39:22 49:5 50:6 57:14,16,20,24 58:5,6 61:12 64:5 64:7 66:2 180:4 183:5 209:24 273:17,23 285:3 285:13 286:9 <b>doesnt</b> 21:17,17 25:6,7,8 37:18 42:10 143:17 146:7 148:12	160:5,16 169:8 172:14,22 182:20 195:19 201:2 203:14 207:7 210:2 223:14,16 224:4 230:18 232:2 244:16 254:9 <b>dog</b> 164:13 165:15 166:14 201:13 <b>doing</b> 11:14 13:5 19:4,21 44:18 64:21 72:14 80:6 80:17 90:24 92:19 98:4 111:7 112:19 149:1,24 208:8 227:1 228:15,15 228:16,18 240:17 249:17 251:10 270:8 291:15 <b>dollars</b> 21:15 <b>donna</b> 1:19 <b>dont</b> 6:13 13:20 15:18 24:21 26:20 26:20 28:4,9,9,12 28:13 34:7 38:3 39:8 40:23 42:24 48:2,18 54:23 60:10 64:14 65:2 65:2,3 66:22 75:9 79:24 80:13,14,14 81:11,16 82:9 94:17 95:8 105:13 112:23 116:4,11 119:23 121:20 126:10 130:12 132:20 134:24 135:1,2 137:2 138:24 142:3 143:1,8,15,15 150:8,16 151:19 154:1 160:22 167:7 168:16 170:16 172:9,11 175:21 190:24 191:14,14,16,16	192:7 193:6 195:5 195:21,23 197:8 198:24 202:10 204:17,17 205:14 205:14 213:2 215:16 217:24 218:4,11,11 220:3 220:3,4,8,9 221:6 223:8 226:5,11,24 227:11 228:13 229:3,15,16,17,22 229:22,23 230:5,6 230:19,20 231:10 231:17,17 232:3 232:23 234:9,18 235:5,11,21 240:13 241:8,14 243:11 246:10,10 247:13 249:5,5,17 251:17 252:7 254:13 255:5,13 255:22 256:5 257:20 259:17 260:16,22,22 262:3,9 268:11 270:1 272:5 274:13,13 277:17 283:3 285:5 287:5 289:21 <b>doublecheck</b> 50:19 184:10 <b>downloaded</b> 34:21 <b>dr</b> 37:14 43:17,23 60:16 67:2,17,20 71:2 226:18 253:16 259:5,16 259:18 260:6,14 271:17 279:2 290:11 <b>draft</b> 299:20 <b>drawbacks</b> 180:18 <b>drive</b> 2:12 3:22,23 4:1,2,14 18:19 24:3 48:21,22 49:11 50:4 66:2,7 66:10,23 67:2,6
--	--	--	--	---

67:17,21 68:8,9 68:15,20 71:1 81:23 226:4 276:23 <b>drives</b> 35:15 38:2 48:9,9,10,14,14 <b>drug</b> 32:15,18 180:12 182:18 183:11 <b>dry</b> 85:12 <b>due</b> 26:12 27:3 237:12 278:24 <b>duly</b> 5:5 300:11 <b>dump</b> 66:12 <b>duplicative</b> 37:21 <b>durability</b> 91:13,18 160:10,18 161:8,9 161:22 223:21 228:21 238:7 283:9 <b>durable</b> 232:11 <b>duration</b> 126:20 <b>duties</b> 14:20 <b>duty</b> 109:7 <b>dysfunction</b> 144:24 178:21 265:22 <b>dyspareunia</b> 88:3 94:16,18,19,21,24 95:2,5,11,13,16 278:22,23 279:20 291:18 295:2,16 295:20 298:13	<b>easy</b> 249:18 <b>eating</b> 86:16 <b>edges</b> 135:23 <b>edited</b> 46:23 54:5 <b>edition</b> 45:12 <b>educated</b> 195:8 <b>education</b> 27:12 45:3 121:13 149:23 276:1 <b>edwards</b> 2:3 <b>edwardsdelacerda</b> 2:5 <b>effect</b> 119:20,22,24 120:5,20 121:5,6 121:8,8 148:11 161:8,17 193:19 234:23 235:11,13 264:14 287:5 <b>effective</b> 132:11,12 133:17 134:19 152:14 222:7 245:15 253:12 260:8 292:4 <b>effects</b> 107:6,21,24 120:2,15 123:17 <b>efficacy</b> 236:9 237:2 252:2 275:9 291:3 298:2 <b>efficiency</b> 99:1 <b>efficient</b> 122:1 <b>effort</b> 37:12 113:8 149:23 237:14 251:11 272:9 <b>eight</b> 63:20,21 201:14 276:24 <b>either</b> 8:13 11:13 22:23 33:18 42:16 47:15 76:8 87:1 125:19 135:21 184:20 193:6 258:13 266:22 299:19 <b>elab</b> 242:14 <b>elaborate</b> 102:10 165:3 230:17 242:14 251:16	<b>elastic</b> 225:14,22 <b>elasticity</b> 230:3 294:4,8 <b>electronically</b> 41:22 42:1,8 <b>elementary</b> 187:13 <b>elevated</b> 289:9 <b>eligible</b> 272:19 <b>eliminated</b> 12:23 <b>elongation</b> 136:2 <b>elution</b> 180:1,12 182:18 183:12 <b>email</b> 156:17 299:21 <b>emails</b> 156:17 <b>emphasis</b> 272:9 <b>emphasize</b> 149:24 <b>employ</b> 100:12 <b>employee</b> 301:12 301:13 <b>empower</b> 112:8 <b>empowered</b> 228:22 <b>enablex</b> 34:7 <b>encompassed</b> 142:18 <b>ended</b> 15:16 24:24 33:18 93:7,10 102:10 <b>endo</b> 96:24 <b>endorsed</b> 294:21 <b>engineer</b> 97:22 98:3 <b>engineering</b> 46:22 98:1,5,8,9,13,24 189:20 <b>engineers</b> 98:19 102:13,15 217:23 <b>enjoy</b> 102:14 <b>enjoyed</b> 102:16 <b>ensure</b> 243:3 <b>entered</b> 59:24 <b>enterocele</b> 89:1 <b>entertain</b> 223:14 <b>entertained</b> 223:13 <b>entire</b> 82:12,15,15 92:13	<b>entirety</b> 82:17 <b>entities</b> 96:21,22,23 97:2 <b>entitled</b> 46:4 52:19 <b>environment</b> 16:22 <b>enzymes</b> 158:24 216:1 <b>epidemiologic</b> 288:5 <b>erode</b> 173:15 <b>eroded</b> 172:18,23 <b>erosion</b> 86:6,7,22 144:23 172:19 174:12,19 176:6 181:23 182:10 225:10 265:11 278:22 280:11 <b>erosions</b> 172:16 280:13 <b>errata</b> 303:11 <b>especially</b> 113:13 113:14 170:8 254:19 <b>esquire</b> 2:5,8,14 <b>essentially</b> 108:1 162:12 180:12 183:20 <b>establish</b> 230:13 <b>established</b> 179:12 <b>establishes</b> 280:18 <b>estimate</b> 63:3 64:12 238:12 276:18 277:5 <b>estimated</b> 156:3 <b>estimation</b> 84:20 <b>estrogen</b> 87:2 <b>et</b> 277:18 <b>ethical</b> 205:16 206:4 207:1,1 <b>ethicon</b> 1:3 5:14 7:5 8:17,18 13:10 13:13,15,18 14:18 15:7,9,15,17 17:1 18:13 19:24 20:2 20:6,10,13 21:10 21:15,23 22:4,9	23:13 24:8 25:11 25:22,22 27:4,19 27:21 28:3,6 33:5 33:6 34:1,21 35:3 39:21 41:1 63:24 64:19 65:8 66:2 90:1 96:24 97:1,4 100:11,12 101:9 121:14 123:8,23 124:3 129:13,18 136:1 137:1 143:4 143:11,24 145:9 145:12 149:10,18 149:22 150:1,4,15 150:18 156:2,4 157:4 160:20 161:4 165:12 189:13 199:24 200:2,7,13 201:4 201:4,10 208:2,17 209:2,12 213:10 214:14 216:11,22 217:22 218:3,7 219:1,16 226:13 226:23 227:1,8 228:8,24 229:20 233:10 234:13 237:22,24 238:3 238:16,21 239:24 240:10,24 241:7,9 241:11,18,20 242:9 243:20 244:3 251:5,8,12 251:17 252:15,19 255:21 257:3 259:4,15 261:5,13 262:4 267:15 273:16,23 285:3,6 293:18 298:7 <b>ethicons</b> 18:23 20:8 22:20 57:16 65:15 102:12 194:15 203:9,17 228:5 238:12 298:13 <b>ethier</b> 46:6,6 <b>evaluate</b> 163:16
---	--	---	---	---

**E**

**e** 3:2 5:1,1 103:16  
302:1  
**earlier** 69:7 127:21  
156:1 274:9  
292:12 293:1  
**early** 13:21 14:13  
76:9 136:2 160:19  
261:8,15  
**easier** 12:5 79:13  
79:13  
**easiest** 39:14  
**easily** 96:4

273:17 286:5 296:10 299:13 <b>evaluated</b> 101:21 101:22 102:1,3 119:15,16,17 131:1 201:14 290:2,8,20 295:15 298:17,19 <b>evaluating</b> 132:23 278:5 290:20 <b>evaluation</b> 125:21 294:9 <b>event</b> 172:20 277:2 <b>events</b> 191:18 <b>eventually</b> 19:8 112:4 164:6,7 186:12 217:4 265:21 <b>everybody</b> 26:15 152:20 243:12 <b>evidence</b> 29:9 57:12 58:2,3 74:14 78:5,16 79:8 80:9 111:6 114:9,16,16 115:10 117:24 118:21 119:1,7,9 119:11 120:21 125:7 132:17 135:3 136:1 139:7 145:7,19 146:3 160:20 161:19,20 163:12,14,22 164:9 171:15 173:11 175:24 176:9 181:19 191:6,8 194:8,10 196:3 217:13,18 217:19 219:7,8 220:6 223:6 228:21 229:13,18 232:7,8,9 233:16 234:8 239:12,20 240:21,21 243:9 243:14,16 245:7 245:11 246:12,18	248:11 250:10 253:7 255:8,9 256:7,10,11,11,14 261:10,20,24 262:4,10 280:17 281:13,14,15 283:6,8 288:17 296:1 <b>evidencebased</b> 118:20 129:22 196:5 <b>evident</b> 205:10 <b>evil</b> 168:9 <b>evolution</b> 76:21 <b>exact</b> 42:22 43:1 149:15,19 176:19 238:14 <b>exactly</b> 26:20 120:17 123:24 128:3 131:21 164:24 165:1 179:15 211:24 213:4 228:3 241:14 290:22 291:17 295:6 <b>examination</b> 3:3 5:8 <b>examine</b> 86:13 <b>examined</b> 5:5 125:21 181:3 <b>examining</b> 19:13 <b>example</b> 18:23 30:11,23 39:17 61:11 115:16 122:8 133:22 149:16,16 163:20 207:13 297:23 <b>examples</b> 16:13 299:1 <b>excel</b> 156:10 157:2 <b>excellent</b> 80:18 206:1 225:19 278:7 <b>exception</b> 74:18 297:10 <b>excessive</b> 146:14,16	<b>excised</b> 85:5,5 <b>excising</b> 81:23 83:16 <b>excision</b> 9:14 81:18 82:7 84:4,5,9 85:15 88:1 91:23 92:8,24 94:9,15 <b>excisions</b> 84:2,7 <b>exclude</b> 263:16 264:1,5 <b>excluded</b> 264:11 <b>excuse</b> 138:17 <b>exercise</b> 148:14 <b>exertion</b> 91:5 <b>exhaustive</b> 65:19 <b>exhibit</b> 3:12,14,15 3:16,18,20,22,23 4:1,2,4,5,8,9,10 4:12,13,14 43:7 43:12,14,16,19,21 44:6,7 45:20 46:1 46:15,18 47:2,3 48:20 49:1,4,8,11 49:16 50:3,9 51:4 51:6,16,17,20 52:1,11,16,19 53:16,18,21 54:13 54:16,21 55:2,4 55:11,14 60:10,15 60:19 67:16,22 69:24 70:1 71:3,4 71:7 96:17 288:19 288:23 289:20 <b>exhibits</b> 3:10 <b>existence</b> 190:5 <b>exists</b> 218:17 <b>expanded</b> 14:14 <b>expect</b> 127:3 142:2 142:3 147:7 206:18 229:14 283:5 <b>expected</b> 125:5,7 179:11 289:10 291:15 <b>expensive</b> 17:13 <b>experience</b> 29:3	30:6,7,8 31:5,9,11 73:11 74:5 79:12 97:6 106:8,9 113:1 119:18 124:19 152:9,9 154:19 176:1 237:16 246:13 252:11 266:1 274:20,21,23,24 275:2,2,4,4,4,11 285:15,23 286:2 <b>experiencing</b> 93:24 <b>experiment</b> 16:16 179:9 <b>experiments</b> 101:13 <b>expert</b> 4:10,12 5:19 7:18,20,21 8:7,17 11:3,5,6,13,22 12:1,14 55:7,8,16 98:21 105:11,19 <b>expertise</b> 15:12 98:13,24 105:23 106:2,7 213:8,9 262:22 <b>experts</b> 59:5 102:11 201:23 254:2,22 255:2,17 299:9,9 <b>expires</b> 300:17 303:20 <b>explain</b> 14:6 24:13 111:4,7 130:5,18 148:24 181:8 248:13 251:2 <b>explained</b> 20:1 93:14 <b>explaining</b> 93:18 251:15 <b>explains</b> 130:14,15 <b>explanation</b> 110:15 171:3,8 176:20 <b>explant</b> 284:5 <b>explanted</b> 106:18 165:12,14,21 166:8,10 284:5,6 <b>explanter</b> 269:18	<b>explode</b> 116:11 <b>explodes</b> 115:18 <b>explored</b> 224:1,1 <b>explosion</b> 116:9 <b>expose</b> 174:7 245:17 <b>exposed</b> 87:7 170:8 170:10,24 172:18 172:22 173:1 181:6 <b>exposure</b> 86:14,21 86:22 87:15 93:6 94:4,5,8,11 170:7 170:13 174:11,19 176:6 179:10 181:23 182:10 246:3,4,5,5 280:7 291:13,16 297:11 <b>exposures</b> 86:24 94:10,12,12 <b>express</b> 70:5,10 71:12 <b>expressed</b> 277:17 <b>extending</b> 93:21 <b>extent</b> 11:10,12 19:9 110:21 111:19 151:13 154:8 163:14 236:15 251:14,16 282:6,7 <b>extreme</b> 279:15 <b>extremely</b> 85:10 152:11 165:3 275:6 289:17 <b>extremes</b> 142:4 <b>extruded</b> 158:1,7 162:21 163:6 <b>eye</b> 87:4 166:1,3,4 166:14 169:21 <b>eyes</b> 121:1
<b>F</b>				
<b>face</b> 297:7 <b>facility</b> 102:8 244:18 <b>fact</b> 41:8 77:21				

Jaime Sepulveda, M.D.

Page 317

139:22 145:7 172:18 174:22 195:16 197:15 206:8,9 209:10 210:2 224:4 228:14 231:19 234:1 241:2 243:12 246:1 254:9 258:14,21 271:1 283:22 <b>factor</b> 133:17 174:21,23 189:2 224:14 <b>factors</b> 83:6 88:17 107:13 173:20 174:1,3 184:19 189:1,23 198:17 225:5 <b>facts</b> 70:18 71:17 <b>fail</b> 164:6,8 <b>fair</b> 6:6,16 16:4 57:24 84:20 105:11 107:2 129:7,10 133:18 154:21 193:21 222:22,24 223:3 227:12 234:4 240:18 243:15 259:5,7 <b>falconer</b> 147:23 148:2 208:24 <b>familiar</b> 29:13 31:24 103:9,21 122:14 187:16,17 187:17,20 192:11 196:12 201:6,12 203:19 211:24 212:3 <b>familiarized</b> 100:10 <b>far</b> 23:2 27:22 36:17 37:15 58:13 58:20 59:11 181:19 202:5 <b>fascia</b> 76:4 <b>fastest</b> 122:6	<b>fault</b> 82:9 156:1 175:7,7,12 <b>faulty</b> 82:9 <b>favor</b> 213:5,6 <b>fda</b> 26:12,15 27:3 28:2,22 29:5 100:23 105:9,9 134:17 135:10,15 182:19 211:22 212:6,10,12,19,24 213:8,22 214:14 230:24 231:6 232:14 233:1,3,10 234:6,13 237:12 238:1 240:19 241:2 247:4,10,24 248:7,18 250:7 281:18 294:19 <b>fdas</b> 236:7 237:1,17 <b>fear</b> 248:12 <b>feel</b> 31:21 153:8 225:8,13 298:21 <b>feels</b> 13:3 212:10 256:7 <b>fellowship</b> 181:9 <b>felt</b> 21:2 86:17,17 <b>female</b> 30:13 287:9 <b>fewer</b> 261:7,7,15 <b>ff</b> 300:18 <b>fiber</b> 85:8 184:19 187:4,4 188:14 <b>fibers</b> 87:2 102:19 217:18 <b>fibroblast</b> 181:4 186:3,14 191:20 192:16 193:13,19 194:14 221:12 <b>fibroblasts</b> 186:19 <b>fibroid</b> 54:7 <b>fibromuscular</b> 173:21 <b>fibrotic</b> 192:11,13 192:19 193:2,15 193:20,24 194:1 194:11 <b>field</b> 101:15	<b>fifty</b> 72:15 <b>figure</b> 66:23 67:6 68:15 92:10,11 <b>figured</b> 122:1 <b>filaments</b> 158:1,7 <b>file</b> 1:3 34:19 67:9 68:13 69:12 70:22 103:7 <b>files</b> 69:10,10 137:1 216:12,22 <b>final</b> 213:21 275:8 <b>finally</b> 164:21 174:4 <b>financially</b> 301:15 <b>find</b> 30:24 31:1 35:12 36:4 60:4,4 60:6 62:5 107:17 138:24 171:19 241:22 242:16,21 244:17,18 270:13 273:5 284:16 <b>finding</b> 118:23 163:19 167:10 <b>findings</b> 119:3,3,6 145:12 163:3,4 164:20 213:17 295:18 <b>fine</b> 155:19,19 215:3 235:15 266:23,23 276:18 <b>finish</b> 6:3 149:1 169:6 <b>finished</b> 162:1 203:18 <b>firm</b> 44:10 68:16 195:15 <b>firmness</b> 226:3 <b>first</b> 5:5 6:3,24 9:19 13:14,17,24 14:17 14:21 15:3 19:5 24:2 35:21 36:5 36:21 41:3 45:10 56:6,15 60:21 73:19 74:2 83:8 84:3 122:14 142:7 157:23 164:1,3,10	169:4,9 185:12 193:3 201:20 211:12 225:1 230:13 253:22,24 257:4,7,8 258:1 270:16 271:21 272:16 278:20 290:10,11 <b>firstyear</b> 18:4 <b>fisk</b> 1:16 <b>five</b> 30:12 55:23 103:4 283:11 <b>fixations</b> 134:14 295:13 <b>flood</b> 131:8,8 <b>floor</b> 187:8 216:24 277:6 <b>florida</b> 1:24 12:17 22:24 300:4,7,8 300:17 301:4,22 <b>flow</b> 181:10 <b>flows</b> 192:8 <b>focus</b> 57:5,14,21 72:4 <b>focused</b> 298:7 <b>focusing</b> 169:9 <b>fold</b> 186:3 <b>folder</b> 60:3 <b>folks</b> 103:2 <b>follow</b> 17:18 30:17 74:6 100:8 112:4 146:16 252:11 271:21,23 <b>following</b> 56:3 96:13 155:22 177:19 215:7 247:4 253:2 262:12 266:14 <b>follows</b> 5:6 <b>food</b> 24:6,7 86:16 <b>footnote</b> 40:13 53:14 288:16 <b>footnotes</b> 40:12 272:20 <b>force</b> 137:9,10 <b>forces</b> 136:10	143:16 186:17 <b>foregoing</b> 301:8 303:6 <b>foreign</b> 78:7,20,21 79:1 186:5,9 190:2,17 264:18 <b>forgot</b> 66:7 <b>form</b> 5:17 14:22 19:4 20:3 21:16 22:12 26:3 27:7 27:21 28:7 29:1 57:8,9,9 58:1 70:13 77:19 78:9 82:13 88:4 89:21 92:14 101:4 104:18 107:8,23 108:9 109:10 111:18 112:14 114:14 115:3 116:19 117:17 120:10 121:17 126:9 127:11,20 129:1 135:11 136:6,6 145:1 148:6 149:21 150:24 151:11,18 152:21 153:11 154:13 159:8 161:14 163:8,24 172:21 178:4,18 179:19 180:8 182:5,16 184:15 185:3 187:9 188:1 190:3 192:22 195:4 196:23 197:20 199:10 200:16 204:16 205:1,7,19 208:4 208:21 209:17 210:8,9,10,22,24 212:7 214:7 216:14 218:19 227:18 228:12 231:8,15,23 240:5 243:4 246:17 255:3 256:3 264:2
---	---	---	---	--



Jaime Sepulveda, M.D.

Page 318

282:18 287:22,24 289:1 297:4,21 298:9,15 303:10 <b>formation</b> 143:23 225:24 264:24 287:21 289:9 <b>forming</b> 57:16 70:19 71:18 <b>forms</b> 125:21 <b>formulate</b> 272:10 <b>formulated</b> 272:8 <b>formulating</b> 269:14 273:13 275:7 <b>formulation</b> 299:5 <b>fort</b> 2:13 <b>forward</b> 83:10 156:9 299:14 <b>forwarding</b> 156:24 <b>foster</b> 252:20 <b>found</b> 39:11 57:23 65:14 77:20 78:16 83:14 145:10,13 145:13,15 186:10 190:6 195:17 278:8 279:7,16 280:16 291:16 292:2 295:19 <b>foundation</b> 22:12 29:24 92:14 108:9 108:22 109:10 119:11 126:23 127:21 134:21 135:11 136:6 138:23 144:4 146:2 147:3 167:16 169:17 176:8 177:4 178:4 178:18 188:1 189:16 192:22 194:19 195:4 200:16 214:23 216:14 218:10 220:2 222:3 224:10 226:15 230:12 231:15,23 232:21 233:12,17	234:8 239:11 249:10 252:4 255:3 256:3,20 259:22 261:9 <b>four</b> 8:12 12:7,10 30:12 48:13 277:8 <b>fourth</b> 96:18 <b>fpr</b> 300:16 301:21 <b>frame</b> 28:13 251:2 <b>framework</b> 119:1 <b>fran</b> 1:7 <b>france</b> 101:19 102:21 <b>fray</b> 136:4,16 138:11,21 140:7 <b>frayed</b> 137:5 <b>fraying</b> 141:9 142:8 <b>frays</b> 139:8 <b>free</b> 265:15 <b>frequency</b> 126:20 133:14 202:19 <b>frequent</b> 94:7 172:24 <b>frequently</b> 93:5 172:23 209:3 <b>friable</b> 176:18 <b>friendship</b> 103:5 <b>front</b> 36:7 <b>frye</b> 1:7 <b>fulfills</b> 212:11 <b>full</b> 5:11 107:10,15 <b>fulllength</b> 191:5 <b>fully</b> 6:4,6 10:15 <b>function</b> 83:20 227:5,17 295:3,21 298:12 <b>fund</b> 33:19 <b>fung</b> 45:13,13 <b>funk</b> 270:18,18 272:16 <b>funny</b> 179:14 <b>further</b> 58:15 299:5 299:17 301:11 <b>future</b> 229:19  <b>G</b>	<b>g</b> 5:1 <b>gallery</b> 14:16 <b>game</b> 249:12 <b>garcia</b> 7:4,10,11 8:16 11:3,19 12:8 50:23 52:15 <b>gather</b> 114:9 <b>gathered</b> 43:23 253:8 <b>gears</b> 106:24 121:12 135:18 155:11 203:21 210:5 214:18 230:22 236:5 251:20 <b>gen</b> 26:23 <b>general</b> 4:10,12 26:23 31:19 35:18 37:19,19 38:3,11 38:11,12 54:17 55:8,16 56:7,18 59:11 63:12 70:1 70:5,10,19 71:12 71:18 78:6,19,19 87:22 91:8,14 92:11 93:17,17,18 109:1 122:10 124:23 138:5 152:17,18,20 153:1 154:24 169:21 190:12 191:15 210:24 224:12,13 245:24 265:9 <b>generalize</b> 162:6 <b>generally</b> 7:24 67:20 122:19 <b>generate</b> 137:11 200:17 <b>generation</b> 219:21 230:7,9,10 <b>geographically</b> 22:22 <b>georgilakis</b> 1:13 <b>german</b> 189:13 <b>germany</b> 285:8	<b>getting</b> 17:15 21:5 21:6,6 29:3 62:13 62:13 108:17 157:18 208:16 226:20,21 251:23 <b>giulia</b> 131:17,19 <b>give</b> 16:13 17:2 33:18 42:18,22 43:1 51:1 87:1 91:12 94:1 99:17 116:18 123:3 125:6 140:11 142:3 143:13 160:17 190:19 206:10 219:18 223:21,22 226:4,5 226:5,11 229:18 231:17 233:23,24 234:9,24 235:18 252:20 256:1 283:4 <b>given</b> 7:1,3,4,7,10 7:12,15,16 12:16 14:1,14,15 15:2 65:9 212:18 227:3 227:15 252:17 263:18 284:3,20 303:8 <b>gives</b> 104:12 191:21 <b>giving</b> 10:4 33:18 102:10 232:5 252:21 256:12 280:22 <b>glad</b> 66:6 <b>go</b> 17:1 19:14 22:24 23:3 27:8 28:8 30:1,21 33:14 45:8 48:13 57:2 59:21,22 66:4 70:14,23 81:11 83:22 102:22 104:10,16 115:13 116:8,17 117:4,21 120:24 123:24 124:1,2 132:4 136:7 144:5 148:7	151:12 153:5 159:17 160:8 167:17 169:6,18 170:20 175:14 178:5 184:16 187:10 188:2 192:9 199:24 203:23 204:8,14 204:18 205:4,11 205:20 206:20,22 206:24 208:22 212:1 214:8 221:22 222:4 223:15,15 224:16 227:13 232:8 236:22 239:13 241:24 242:9,11 244:6 249:11 250:17,18 252:5 256:4 257:23 263:5,20 266:10 268:20 269:3,4 270:1 271:9 272:5 276:20 288:4 291:21 296:16 299:2 <b>goes</b> 82:20 98:23 152:13 196:9 197:16 212:9 244:18 <b>going</b> 11:9 18:19 19:2,2,23 23:3 29:10,10,10,23 32:3,5 37:4 39:4 39:16,19 41:9,13 41:14 42:17 43:7 43:16,22 45:7,19 47:18 53:16,16 55:2,19 59:6 60:14 64:14 67:11 67:16 68:8,12 73:15,17 74:18 77:15 78:4,15 83:19 85:11 87:18 93:8,19 96:8 105:9 106:24
--	--	---	--	---

107:13 111:8,11 112:3,3 113:12,13 115:8,13,23 116:17 117:18,23 119:11 121:23 122:7,9 125:6 143:13 145:21 149:8 151:2,3 153:16,20 154:2 155:15 157:22 167:15,24 168:22 169:1,3,3 176:15 179:2 181:9 193:4 195:10 206:11,11 206:12,13 207:12 212:14,19 213:21 214:4,16 219:11 221:4,5,16,16,20 223:15 224:16,23 229:22,23 230:5,7 230:9,21 234:21 235:10 236:14 239:8,18 241:3,10 241:15,15,24 242:3,8,18,19 243:13 249:15,16 249:23 250:12 251:7,8 253:22 254:10 255:6,6,15 255:21 259:5 262:11 267:14 269:4 270:2 287:15 289:23 290:15 291:15 292:10 <b>gold</b> 74:16,19,22,24 75:5 79:2 <b>good</b> 17:15 24:9,11 24:11 55:24 60:12 78:5 97:24 110:1 110:12 118:6 119:14 133:15 139:24 143:3,19 143:21 146:16 149:24 176:14 177:16 205:22,22	210:18 221:5 223:22 232:10 241:8 243:3 251:22 255:12 272:24 277:9 280:1 284:4,6,7 286:11 <b>goodwin</b> 1:4 <b>goretex</b> 173:10 <b>gotten</b> 266:22 <b>govern</b> 103:10,22 <b>grabowski</b> 1:9 <b>grade</b> 253:12 <b>graduate</b> 98:7 <b>graft</b> 89:4 91:16 174:7,23 251:24 284:6 <b>grams</b> 184:1 <b>granulation</b> 94:13 94:14 265:5 297:14 <b>granulomas</b> 264:24 <b>gray</b> 1:6 <b>great</b> 46:14 47:18 48:6 55:1 74:5 195:9 235:7 241:9 241:10,18 <b>greater</b> 136:3 145:22 146:22 190:1 245:18 <b>grounds</b> 161:18 275:21 <b>group</b> 5:22 17:1 29:11,12 102:20 117:6 119:6 221:15 260:2,3,4 260:7 271:24 284:13 290:1,14 <b>grouped</b> 122:4 <b>groups</b> 20:6 140:1 <b>grow</b> 186:19 193:13 194:14 <b>growing</b> 186:4 <b>grown</b> 125:3 <b>growth</b> 192:16 193:19	<b>gudion</b> 166:21 <b>gudoin</b> 166:23 <b>guess</b> 7:13 16:3 19:6 23:6 25:2,22 36:1 51:23 58:9 79:14 87:6 95:17 97:7 118:2 142:17 193:5 213:12 239:2 253:17 257:17 273:5 <b>guide</b> 128:4 154:20 262:21 263:22 <b>guidelines</b> 23:20,23 <b>guides</b> 124:10 <b>guy</b> 189:13 <b>guys</b> 147:22 155:14 236:1 <b>gyn</b> 125:1 181:9 <b>gynecare</b> 3:12,12 41:15,16 43:12,12 <b>gynemesh</b> 3:12 4:10 5:15 20:14 20:15 35:3,4 41:2 41:16 43:13 55:8 56:20 59:12 68:1 71:8,13 89:5 90:1 90:3,5,14,16 91:17 95:21 121:14 122:11,16 123:1,10 124:20 126:8,19 127:8,16 128:8,15,19,23 129:6 130:1,10,14 131:2,6,6 132:1 133:2 157:21 158:5,13 169:16 177:3 178:2 196:10 197:11,17 203:3 214:19 215:9,11 216:3,4 216:7,12 217:7,22 218:9,17 219:2,7 219:9,23,24 220:10 222:6,7 223:6 224:5,8,19 228:9,22 229:21	230:4,11 237:18 239:1,16 240:7 247:23 248:8,17 250:13 253:8 261:6,14 262:2,5 262:6 275:9 290:6 291:4 292:3,4,14 292:20 295:9 296:22 297:18 298:2,7 <hr/> <b>H</b> <hr/> <b>hadnt</b> 232:14 <b>half</b> 29:18 33:9 <b>halina</b> 253:24,24 <b>hand</b> 167:6 288:22 <b>handed</b> 51:5 <b>hands</b> 42:17 139:15 <b>handwritten</b> 65:3 <b>handy</b> 291:21 <b>happen</b> 31:10 93:5 95:4 108:1 175:16 178:22 217:9 248:20 264:10,14 <b>happened</b> 22:23 34:10 139:13 175:13 <b>happening</b> 31:20 107:12 140:4 170:13 174:12 224:8 <b>happens</b> 44:2 85:11 93:19 142:15 169:11 172:14 181:5 191:19 197:7 231:2 <b>happy</b> 85:13 <b>hard</b> 37:21 154:16 156:7 207:14 <b>harm</b> 83:12 129:17 <b>harter</b> 1:10 <b>hasnt</b> 114:24 116:23 117:13 118:16 199:20 201:5 234:5 <b>havent</b> 31:9 38:6	58:9 83:14 85:9 125:18,24 165:18 165:18 194:20 209:21 233:18 234:10 266:22 297:8 <b>hazard</b> 264:9 <b>hazards</b> 263:16 264:1,5 <b>head</b> 6:10 73:2 189:12 <b>heal</b> 174:8,9 <b>healing</b> 173:2,4,5 173:12,18,19 174:4,12,15,20 175:4,8 214:21 215:22 297:13 <b>health</b> 12:18,18,20 <b>healthy</b> 148:13 <b>hear</b> 31:7 239:19 <b>heard</b> 30:2,7 192:13 209:21 259:8 291:7 <b>heart</b> 104:6,6 166:6 166:10 250:21 <b>hearts</b> 166:9 <b>heavier</b> 221:21 <b>heavy</b> 184:17 189:18 <b>heavyweight</b> 183:18 184:13,17 185:2,15,24 186:7 186:9,20 187:8,19 187:23 189:14,18 190:1 192:18 194:17 195:2,6,7 195:11 220:13 222:1,17,23 223:11 <b>heavyweights</b> 195:15 <b>held</b> 56:3 59:23 96:13 155:22 177:19 215:7 266:14 <b>helping</b> 13:12
---	--	---	---	--

<b>hematomas</b> 174:4 264:24	<b>honest</b> 86:14,15	<b>hymenian</b> 257:12	36:24 41:14 45:15	42:18,20,22,23
<b>heniford</b> 187:17	<b>honestly</b> 60:4 259:14	<b>hypothesis</b> 106:16 144:13 172:3,4	270:6 272:17	43:1 46:14 48:18
<b>heres</b> 38:18 39:7 244:20	<b>hooper</b> 1:15	199:22 200:22	273:22 285:11	49:21 50:2 52:10
<b>hernia</b> 216:9	<b>hoping</b> 204:18	202:5,6 217:9	<b>identifying</b> 69:8	58:18,18,18 59:4
<b>hes</b> 40:21 155:19 234:5 236:4	<b>hospital</b> 9:1 71:23 71:23 243:22	221:13 222:13,22	<b>ifu</b> 44:22 121:19	59:9 60:11 64:15
257:17 262:18	244:14 249:23	222:24 223:1,4,5	122:9 123:15	86:19 105:8 135:8
263:18 279:2	<b>hospitals</b> 243:19	277:22 284:17	124:12,14 125:5	140:24 204:1
<b>hey</b> 236:3 241:9 244:3	<b>host</b> 160:16 174:23 174:24 175:22	292:6,7	126:10,12,17,24	233:23,24 239:23
<b>hierarchy</b> 115:12 115:13 273:11	199:3 265:1	<b>hypothesized</b> 202:8	127:1,3,6 128:3	239:23 253:17,18
<b>high</b> 91:5 249:13 250:5,6,7,9,18	<b>hosts</b> 164:17	<b>hypothetical</b> 116:1 116:6 120:10	129:12,15,19	258:2 268:22
251:9 261:2	<b>hotel</b> 24:1	129:20 140:13	138:21 139:21	288:21 299:13,22
268:11,12 272:4	<b>hour</b> 55:20 61:2 96:9	142:13 147:4,9	140:9 141:4,11,14	<b>illustrate</b> 207:20 279:14
291:2 296:8,13	<b>hours</b> 59:15,17 60:3,13,22,24	161:14,18 188:4	141:16,18,20,23	<b>im</b> 5:21 11:9 14:5
<b>highcaliber</b> 261:2	61:5,19 62:19	190:21 194:2,2	142:2,11 143:19	28:17,17 29:23
<b>higher</b> 85:20,21 178:21 267:17,21	63:3,10,10,20,21	227:19 247:5	146:5,8,20 147:7	32:3,13 37:4,12
272:9 279:20	<b>huge</b> 180:14	248:3 254:8 255:4	147:12,16 149:7,8	39:19 40:18 41:9
293:14 296:15,23	<b>human</b> 78:21 115:19 117:4,7,7	280:4	149:13 150:20	41:13,14 43:7,21
297:15	117:7 142:22	<b>hysterectomies</b> 297:16	159:1 169:8,15	44:5,15,20,22
<b>highest</b> 115:9,14 296:3	143:8,18 159:7,13	<b>hysterectomy</b> 91:3	178:17 195:20,22	45:6,10,19 47:2
<b>highlevel</b> 274:19 296:1	160:4,21 161:13	<hr/> <b>I</b> <hr/>	196:2 197:19	47:18 48:20 49:3
<b>highlighted</b> 298:21	163:21,23 166:10	<b>id</b> 68:11 168:24 266:5	214:24 215:11	49:10 50:3,15
<b>highlighter</b> 64:23	171:13 177:2,23	<b>idea</b> 49:20 60:12,22 93:18,18 100:15	216:3 228:11	51:3 53:15,16,20
<b>highly</b> 19:16,19,20	196:22 197:3	104:1,2,14 219:5	229:4,9,11 262:16	54:6,15 55:2,13
<b>highrisk</b> 105:6 249:7 251:1	248:5 287:9	265:14	262:19,20,22	57:7 60:14,15
<b>himalayan</b> 164:14 164:14,14 199:4	<b>humans</b> 117:2,2 159:14 165:12,16	<b>ideally</b> 107:14 265:20	263:15,21 264:11	64:23 66:6,14
<b>hired</b> 5:13 13:15,18 13:24	165:21 198:3	<b>identical</b> 158:2,8 158:10 162:20,23	264:16 276:1,7,10	68:23 73:17 74:18
<b>history</b> 103:7	199:9 203:11,13	163:6	276:14 277:7,10	77:13,14 78:4
<b>hold</b> 11:9,9 140:11 170:15 190:19	<b>hundred</b> 95:23	<b>identification</b> 43:15,20 44:8	277:14,14	82:1 85:10 90:14
220:1 236:11	<b>hundreds</b> 232:18 294:21	46:2,19 47:4 49:2	<b>ifus</b> 121:16 122:10	93:1,18 100:10
254:7 256:1 294:8	<b>hydrocarbon</b> 171:21	49:9,17 50:10	122:15,20,21,24	101:23,24 103:19
<b>holding</b> 42:23	<b>hydrodissect</b> 92:21	51:7 52:17 53:19	123:10 124:15	103:20 105:9
<b>holste</b> 189:9	<b>hydrodissection</b> 35:12 37:13	54:14 55:5,12	126:7,18 127:7,15	106:24 109:15,17
<b>home</b> 53:5 86:15	<b>hydrogen</b> 197:3	60:20 67:5 71:5	128:7,15,18,22	110:3 111:11
	<b>hydrolysis</b> 159:22	<b>identified</b> 65:20 274:11 285:12	129:6,24 130:7	115:23 116:13
	<b>hymenal</b> 257:9,13 257:14 258:5,6,7	298:24	145:24 147:1	118:2 122:6,8,9
		<b>identify</b> 11:12	158:12,21 177:2	122:17 123:14
			178:2 182:15	124:5,5 135:7
			195:2 203:3	137:8 143:13
			214:19 215:1	144:6 145:13,21
			216:4 231:21	147:9 153:2
			275:20,22 290:8	155:14,19 156:24
			<b>ignored</b> 240:23	157:20,21 158:20
			<b>ii</b> 253:12	163:18 165:18,24
			<b>iii</b> 253:12	166:2,12 167:15
			<b>iliococcygeal</b> 89:1	167:20,20 168:6,6
			<b>ill</b> 6:5,15 39:13	

Jaime Sepulveda, M.D.

Page 321

168:14,20,20,22 168:23 169:4,5,10 182:6 189:19 193:1 194:24 197:9 200:10,11 201:15 203:19 206:3,11,12,13 207:12 210:9 211:24 212:2 213:3,12,19,20,24 214:16,24 215:11 216:18,18 217:3,3 218:15 221:4,20 224:16 226:24 227:9,10,10 232:22,22 233:13 235:24 236:1,14 236:17,19 239:8 239:18,21 240:15 240:15 241:14,15 242:3 243:5 251:10,15,22 253:15,22 255:6 256:21 259:17 260:16 261:18,19 262:11 266:8 269:4 270:16 272:12 274:8 280:22 284:6 286:10 289:23 292:8 296:16 298:7 299:14 <b>image</b> 66:17,18 <b>images</b> 67:7 <b>ime</b> 11:14 <b>immaterial</b> 109:22 <b>immersing</b> 180:13 <b>immune</b> 174:3 199:6 <b>immunologic</b> 164:19 <b>impact</b> 161:7 170:4 227:3,15 <b>impair</b> 227:5,17 <b>impaired</b> 214:22 215:22	<b>implant</b> 18:23 19:8 29:19 90:5,14,16 90:22 133:24 143:15 159:7,13 160:4,17 175:9 184:22 186:4 191:21 202:24 213:14,18 214:6 219:7 220:19 239:4 246:2 266:3 287:2 <b>implantation</b> 197:10 198:9,10 203:2 287:10 <b>implanted</b> 29:21 84:11,12,15,22 95:22,24 96:5 109:9 143:6 144:10 159:13 166:5 203:7,10 213:16 250:13 263:13 280:19 287:9,16,21 <b>implanter</b> 269:18 <b>implanting</b> 88:15 89:17,19 99:13 212:17 214:1 234:5 248:23 255:14 269:11 <b>implants</b> 142:22 160:12,12 164:18 165:1 170:24 186:17,18 218:16 219:6 234:3 <b>implemented</b> 16:21 <b>implications</b> 196:4 196:6 199:11 250:9 <b>important</b> 28:22 113:2,7 143:20 156:19 190:15 199:15 274:21,22 274:23 276:12 298:22 <b>importantly</b> 172:12 271:3	<b>imposed</b> 242:11 <b>impression</b> 38:11 278:10 <b>improper</b> 140:13 142:12 147:4 161:14 <b>improvement</b> 121:7 <b>inaccurate</b> 182:21 245:10 <b>inadequate</b> 242:20 <b>incidence</b> 178:23 202:18 295:15 <b>incidents</b> 178:24 <b>incision</b> 86:10,18 87:10,16 91:22 173:15 175:21 182:1 201:22 <b>incisions</b> 297:12,13 <b>inclination</b> 31:8 <b>include</b> 20:13 27:16 62:1,20 70:18 71:17 89:9 126:20 127:8,12,17 138:24 146:5,19 196:2 229:4,5 <b>included</b> 58:7 62:9 68:3 69:3 123:9 130:13,17 138:21 140:9 145:24 146:8 147:1,16 177:2 178:2,17 182:15,20 183:8 195:2,19 197:19 197:21,22 202:22 202:23 203:2 211:21 216:3 228:10,14 229:9 231:21 263:2 264:16 276:14 <b>includes</b> 65:22 70:7 107:19 183:10 <b>including</b> 107:6,19 107:21 111:20,22 113:11 118:13 184:19 198:1	236:15 <b>incompatible</b> 196:18 197:17 <b>incomplete</b> 115:24 116:6 120:10 126:9 190:21 227:18 247:5 248:3 254:8 255:3 <b>inconsistent</b> 283:15 283:20 <b>incontinence</b> 4:6 8:8 11:20 12:2,9 33:16 34:3 52:22 72:2,6,22 73:16 74:17 116:11 124:10 161:23 162:6 178:23,24 185:9 208:7 262:21 281:7 282:3,4,13 287:11 <b>increase</b> 108:7 127:18 128:10 144:23 227:4,16 294:3 <b>increased</b> 133:13 227:3,15 265:10 <b>increases</b> 190:5 <b>indefinitely</b> 158:19 <b>independent</b> 141:15 142:7 <b>indepth</b> 277:13 278:13 284:24 <b>indicate</b> 161:13 199:9 227:21 <b>indicating</b> 150:6 <b>indication</b> 72:23 90:8,10,22 199:7 239:1,4,17 240:8 294:7 <b>indications</b> 73:13 73:16 239:3 <b>indicative</b> 165:23 167:13 <b>individual</b> 275:11 <b>individuals</b> 19:21 243:7,13	<b>induce</b> 192:19 <b>induced</b> 198:10 203:1 <b>industry</b> 23:21 103:9 <b>inert</b> 158:14,16 159:5,14 160:6 161:13 <b>inexperienced</b> 83:11 <b>infer</b> 185:8 <b>inference</b> 151:4 <b>inferences</b> 224:3 <b>inflammation</b> 190:16 199:19 202:6 265:6,7 <b>inflammatory</b> 183:13 186:11,12 186:13 187:3 191:10,17,19 197:4,11,13 202:7 221:11 <b>inform</b> 109:7 209:12 <b>information</b> 11:16 58:17 67:5 68:7,8 68:14 100:19,20 100:23 112:8 113:3,11,18 114:4 114:5,11 115:4,6 115:7,8,10,13,21 116:14 117:11,14 118:3,6 119:12,13 128:14,18,22 129:5,18 136:24 137:3 139:5,20,21 141:3,6,10,11 149:7,12,14,15 178:1 193:6,9,11 197:19 198:2 199:1 203:2 212:6 228:7,10,23 229:8 229:11 238:11 255:22 259:9 267:6 <b>informed</b> 107:11
--	--	--	---	---

Jaime Sepulveda, M.D.

Page 322

108:20,23 109:12 110:17 111:24 112:6,23 113:5 117:16 118:4 <b>informing</b> 123:18 <b>infrequent</b> 81:22 81:24 <b>inherent</b> 246:1,16 263:22 265:1 <b>initial</b> 133:22 186:10 <b>initially</b> 14:1 16:14 265:14 <b>initiation</b> 100:14 <b>injected</b> 183:13 <b>injuries</b> 120:3 <b>injury</b> 9:13 10:3 119:19,21,24 120:6,8,9 <b>innovated</b> 219:22 <b>innovation</b> 207:4 219:5,12 <b>innovative</b> 208:6 221:22 <b>inoffice</b> 87:7,22 <b>input</b> 99:17 102:19 <b>inquiries</b> 100:11 <b>inserted</b> 198:18 <b>insertion</b> 86:2 141:21 175:3,23 <b>inside</b> 42:3 115:18 138:2 <b>insideout</b> 72:8 211:15 <b>insist</b> 256:12 <b>inspection</b> 152:22 <b>instance</b> 74:7 134:4 <b>instances</b> 11:7 175:18,20 294:15 <b>institutions</b> 249:24 <b>instruct</b> 11:10 <b>instructions</b> 127:22 141:23 <b>instructs</b> 150:19 <b>instruments</b> 14:15 104:9	<b>intend</b> 122:23 235:11 269:6 <b>intended</b> 160:12,14 <b>intent</b> 220:2 <b>interact</b> 160:15 <b>interacted</b> 102:14 103:2 <b>interaction</b> 109:5 148:13 174:22 207:2 209:18,19 <b>interest</b> 14:12 17:23 <b>interested</b> 36:2 301:15 <b>interesting</b> 31:6 194:12 241:5 <b>intermittent</b> 104:7 <b>internal</b> 25:5 39:21 57:13,16,20,24 58:5,6 148:8 251:5 267:14 <b>internationally</b> 33:7 <b>internet</b> 156:21 <b>internus</b> 82:23 83:2 83:5 84:1 <b>interpret</b> 159:19 160:23 <b>interrupt</b> 26:18 <b>interruption</b> 161:24 <b>intervention</b> 272:2 <b>intraoperatively</b> 150:23 151:8 <b>introduced</b> 252:3 258:15,22 <b>introduces</b> 245:21 <b>introductory</b> 3:18 3:20 46:4,15 <b>invented</b> 239:24 <b>invention</b> 260:19 260:20 <b>inventor</b> 207:23 208:5 211:17 256:16 258:15,22 259:18,24 260:18	266:2 <b>inventors</b> 147:20 <b>investigate</b> 28:23 275:5 <b>investigated</b> 298:18 <b>investigation</b> 279:7 <b>investigations</b> 12:21 <b>investigator</b> 54:7 216:16 253:10 <b>investigators</b> 216:19 261:3 <b>investment</b> 206:13 <b>invited</b> 219:18 <b>invoice</b> 61:7 <b>invoices</b> 4:13 59:13 59:19 60:2,2,16 67:14 <b>involve</b> 8:13 39:16 97:15 108:11 142:22 272:18 <b>involved</b> 9:19 14:11 63:13 88:10 99:15 100:2 102:12 124:12 248:12,13 <b>involves</b> 179:7 212:22 <b>involving</b> 11:19 12:9 14:7 15:5 27:20 29:19 59:11 81:18 82:7 91:24 92:8 <b>irresponsible</b> 256:13 <b>isabel</b> 1:17 <b>isnt</b> 172:18,19 235:4 243:2 246:11 <b>iso</b> 103:12,12 179:24 183:8 <b>israel</b> 279:3 <b>issue</b> 27:20 28:2,5 31:11 134:16 135:9,19 139:19 141:8 144:21 146:20 150:5,12	155:11 157:6 168:5 173:19 174:13 175:5,9 177:22 179:7 187:14 206:21 213:12 217:10 219:2 226:13 233:11,20 235:3,4 235:6 282:22 284:17 <b>issued</b> 237:18 <b>issues</b> 103:2 122:3 122:4 157:20 175:12,14,16 285:16 298:18 <b>items</b> 36:22 <b>iuds</b> 170:23 <b>ive</b> 30:2 31:4 40:16 53:6 54:18 55:2 55:14 61:16 96:21 96:23 156:16,20 188:18 192:13 208:23,23,24,24 284:20	<b>journals</b> 125:2 <b>judge</b> 1:5 205:21 <b>july</b> 29:6 247:4,24 248:7,17 <b>junction</b> 208:9 265:20 <b>justification</b> 83:21 83:22
<b>K</b>				
<b>k</b> 212:22 213:1,4 233:6,15 234:14 235:13 249:13 <b>kaiser</b> 269:23 270:12 <b>karram</b> 29:15 271:17 <b>keep</b> 44:18 79:13 83:11,15 139:14 210:20,20 <b>kept</b> 85:9 <b>kimberly</b> 1:13 <b>kind</b> 16:8 23:16,20 38:11 77:11 93:5 157:5 165:23 169:6 170:10 203:11 208:6 296:10 297:9 <b>kit</b> 3:13 41:17 43:13 <b>kits</b> 236:9,13,20 237:3 <b>knew</b> 91:8 103:24 104:6,14 125:12 126:1 150:13,16 166:17 188:16 223:20,21 266:2 <b>knitted</b> 158:1,7 162:17,18,19,21 162:21 184:21 <b>knitting</b> 102:6 <b>know</b> 6:19 8:2 10:7 12:23 19:21 22:23 24:8 25:11 28:14 30:12,14 31:1,18 33:12 36:17 38:4				
<b>J</b>				
<b>jack</b> 290:8 <b>jackie</b> 1:7 <b>jaime</b> 1:21 5:4,12 149:9 195:10 300:9 301:6 303:15 <b>jennifer</b> 1:16,17 <b>jersey</b> 22:24 <b>joan</b> 1:9 <b>job</b> 15:2 <b>jody</b> 300:6,16 301:3,21 <b>johnson</b> 5:13,14 8:17,18 64:18,18 96:24,24 <b>jonsson</b> 270:17,18 272:16 <b>joplin</b> 1:6 <b>jorge</b> 189:8 <b>joseph</b> 1:4				



Jaime Sepulveda, M.D.

Page 323

38:4,15 39:15	241:10,14 243:6	52:10,18 53:1,15	194:22 195:18	240:1 250:6
40:23 41:7,24	243:18 250:10	53:20 54:15,22	197:2,23 199:19	<b>labeling</b> 250:7
48:18 49:18 52:13	251:4 253:17	55:1,6,13,19,24	200:19 204:21	<b>laboratory</b> 18:11
54:4,10 58:23	254:10 255:16	56:4 57:13 58:4	205:4,11,24 206:8	198:8
59:6,9 61:7 62:23	256:16,18,23	59:10,21 60:5,14	208:16 209:1,21	<b>labs</b> 17:11,11
63:5,8 64:14 69:6	257:2,6,20,24	60:21 66:6 67:10	210:13 211:1	276:13,14,17,19
75:9 76:14,18,24	259:4,15 260:13	67:15,19 68:6,18	212:13 214:15	<b>lack</b> 288:17
79:17,22,24 80:14	266:2 268:8	68:22 69:5,20	215:3,8,18,19	<b>lacks</b> 126:22
81:16 93:4 95:8	270:23 271:1	70:16,24 71:6	216:2,21 217:5	127:20 146:2
100:7,16 101:2,11	272:11,14 276:10	77:24 78:18 79:10	218:13,24 220:11	147:3 169:17
101:12,14 102:2,7	276:10 285:11	82:18 88:6 89:24	222:10,20 224:13	177:4 194:19
102:11,20 103:4,7	290:1 293:3	92:23 96:14 101:6	226:22 228:5	222:3 226:15
104:22 109:14	<b>knowing</b> 109:4	104:22 107:20	229:7 231:11,19	259:22
114:18 116:4,11	<b>knowledge</b> 53:24	108:4,16,24	232:12,17,23	<b>laparoscopy</b> 33:7
123:8,21,21 124:2	66:5 80:12 101:8	109:15 110:1,23	233:7,14,18	<b>large</b> 185:7 209:10
129:17 131:3	125:15 150:15	111:20 112:21	234:11 235:24	290:10,18,23
134:16,24 135:1,2	205:22	114:2,10,21	236:4,5,17,24	291:1,1 300:8,17
136:24 137:2	<b>known</b> 12:17 107:6	115:15 116:2,20	237:6 239:14,23	301:22
143:1,4 144:15	107:21,24 117:12	118:1,13,21	240:7,14 241:17	<b>larger</b> 281:22,24
145:9 147:19,22	124:17 127:9,14	120:18 121:20	243:18 246:21	289:24 290:2
150:8,16 151:23	133:24 150:15	126:11,18 127:7	247:16 248:6	291:10 292:2
152:6,8,8,10,15	263:16 264:1,5,9	127:15 128:1,14	250:2 251:4	<b>largest</b> 21:24
153:21 154:1	273:2	129:5,12,23 133:6	252:14 254:13	<b>laser</b> 79:18,19,19
164:9 165:3,11	<b>knows</b> 115:17	135:6,17 136:12	255:13 256:15,23	79:20 88:12
166:12,13,14,18	116:21 118:15	139:3 140:23	257:23 259:24	135:22,24 136:3
167:7 169:1,2,3	<b>krystal</b> 1:18	142:6,17 144:8	260:13,24 261:12	136:15 138:19
171:9,11,11,13		145:4 146:6 147:8	261:22 262:11,24	140:6 141:7 143:5
172:9,12,12	<b>L</b>	147:18 148:10	263:8,11,24 264:3	144:2,21 145:9,22
175:14,16,18,20	<b>l</b> 15:12 300:6,16	150:3 151:5,16,22	264:8,17 266:5,10	146:9,12,22 148:3
181:14 183:17	301:3,21	152:23 153:6,16	266:15,23 267:3	153:19 154:5
191:5,14,16 193:4	<b>1929</b> 181:3	154:23 155:8,17	268:22 269:5,9	273:24 277:23
195:9 196:16,21	<b>la</b> 2:3,5 3:4 5:9,20	155:23 156:9,15	273:23 275:20	278:12 279:1,14
197:3,7,8,23	11:18 15:1 20:7	156:22 157:9,12	282:18 284:22	279:19 280:4,10
201:12 207:1	21:21 22:15 26:7	157:16,19 159:12	285:2,10,17	280:19
211:20 212:15,24	27:13 28:1,19	160:3,11 161:20	286:17 289:22	<b>lastly</b> 299:4
213:13,14,16	29:5 30:4 35:16	162:8,16 163:18	290:4 291:8	<b>late</b> 76:9
214:4,9,9,10,10	35:19 37:15,24	165:8 166:20,23	292:12 293:17,21	<b>lately</b> 84:18
214:11,12 217:5	38:8,13,16 39:4,6	167:2,9,19 170:5	296:7 297:1,4,21	<b>lateral</b> 83:12
217:21,24 218:24	40:11,15 41:9,13	171:2 173:17	298:9,15 299:4,17	<b>latest</b> 295:5
221:20 223:4	41:24 42:7,21	176:11 177:8,15	299:22	<b>launch</b> 254:3,4,15
227:11 229:22,23	43:3,6,11,16,21	177:20 178:13	<b>lab</b> 17:3,24 18:11	254:23 257:3
230:5,6,16,19,20	44:5,13,19,22	179:6,22 182:8,22	142:23 185:7	<b>law</b> 2:6 68:16
231:17 232:13	45:5,19 46:3,20	184:23 185:10	276:16 277:12	<b>lawyers</b> 304:1
233:2 234:4,16,17	47:5,21 48:4,6,7	187:15 188:5	285:7,8,20	<b>layer</b> 173:21
234:18 235:2	49:3,10,18,21	189:24 190:9	<b>label</b> 250:3 251:8	<b>layout</b> 221:12
237:21 238:2,14	50:2,11 51:3,8,15	191:9,22 193:5,21	<b>labeled</b> 48:15 50:4	<b>lead</b> 29:15 176:6

181:23 182:9,11 189:1 225:1,2,10 257:2 280:6 288:20 <b>leading</b> 285:17 290:4 <b>leads</b> 145:20 186:13 191:19 <b>leak</b> 76:1 <b>learned</b> 17:19 129:14 146:15 150:9 196:14 <b>leave</b> 52:4 79:4 <b>leaves</b> 79:6 <b>leaving</b> 190:14 <b>lee</b> 1:15 <b>left</b> 293:11 <b>leftover</b> 243:20 <b>legal</b> 15:19 129:20 207:15,17 <b>length</b> 227:24,24 228:3,4 295:4 297:2 <b>lesser</b> 252:17 <b>letter</b> 242:15 244:6 244:8,9 247:9 <b>letters</b> 157:11 <b>letting</b> 156:18 <b>leval</b> 211:11,12,15 211:17 <b>levals</b> 211:21 <b>level</b> 25:7 78:11,14 111:6 115:9 132:16 140:21 142:14 163:2 164:20 186:16,16 186:17,22 207:11 225:24 231:1 272:9 275:11 296:3 <b>levels</b> 100:19 124:18 197:1 <b>liability</b> 1:4 <b>lichen</b> 265:2 <b>life</b> 121:4,7,10 161:2	<b>lifealtering</b> 116:21 116:23 117:15 118:14,24 <b>lifetime</b> 160:14,16 <b>ligament</b> 134:13,14 175:17 217:17 <b>ligamentous</b> 89:2 <b>ligaments</b> 217:16 <b>light</b> 119:15 221:21 221:22 <b>lighter</b> 221:2,3 281:22,24 289:24 290:2 291:10 292:3 <b>lightest</b> 223:16 <b>lightweight</b> 183:18 184:13 185:2,15 185:23 186:6,20 187:7,12,19,22 190:2 194:18 195:7,11 200:15 220:12,15,18 221:3,8,24 222:16 222:23 223:10 290:23 <b>lightweights</b> 195:15 <b>liked</b> 149:16 <b>likelihood</b> 261:20 <b>limited</b> 9:2 273:9 <b>limits</b> 24:5 <b>linder</b> 288:20 289:12 <b>line</b> 86:18 208:3,18 209:7 302:4 304:2 <b>lines</b> 102:5 186:4 196:15 223:24 238:5 294:2 <b>linked</b> 199:20 201:11 <b>links</b> 288:14 <b>list</b> 4:9 36:3,4,6,18 36:23 37:2,10,20 38:6 40:16,21 41:5 44:3,11,16 44:17,23 45:1,6	47:16 48:1 49:5 49:13 54:17,19,24 58:13 62:4,6 65:6 65:7,10,16,19 70:17 71:16 116:17 132:4 224:16 235:20,22 272:14 290:8 <b>listed</b> 36:7 97:8 267:5 <b>listen</b> 80:20 232:8 248:20 <b>listened</b> 242:3 <b>literally</b> 179:18 <b>literature</b> 3:15 4:4 39:18 40:2,5,7,9 43:23 44:2 50:24 51:4,9,10 52:1 57:2,23 58:19 115:1 118:17 260:6 273:15 274:18 277:20 286:6 <b>litigation</b> 1:4 10:16 10:18 11:7 13:10 13:11 64:18 196:15 248:12 <b>little</b> 14:5 62:18 71:21 76:1 80:23 101:7 106:24 116:9 135:18 180:5 199:11 203:21 206:1 210:5 214:18 224:16 230:22 236:6 251:20 <b>living</b> 3:16 45:11 <b>llp</b> 2:11 <b>local</b> 7:7 68:15 198:9 203:1 <b>locally</b> 276:20 <b>lodging</b> 23:14 <b>long</b> 13:5 22:13 26:17,21 32:20 39:5 63:19 73:9 87:13 101:13	129:22 153:23 208:11 <b>longer</b> 77:23 78:2 <b>longest</b> 191:6 292:11 <b>longterm</b> 130:9 208:2 283:8 <b>look</b> 20:4,5 26:14 26:14 27:23 28:16 28:24 49:24 53:2 59:19 66:8 92:4 102:17,18 105:21 106:11 116:14,15 121:10,11 153:22 154:7 157:17 168:1 175:3 184:13 193:1 195:10 232:6 235:17 241:1 242:19 248:9,21 250:10 257:16,18 258:2 269:17 273:16 277:20 283:1 296:17 <b>looked</b> 31:22 39:10 278:20 282:21 287:4 <b>looking</b> 45:10 67:2 68:23 83:15 106:21 125:24 153:24 192:1 193:12 201:19 221:19 270:16 275:6 293:1 299:14 <b>looks</b> 39:9 46:7 66:17 67:7 138:7 157:1 <b>lose</b> 136:4,4,15,16 138:10,11,20,20 140:6,7 161:16 289:21 <b>loses</b> 144:9 <b>loss</b> 30:17 141:8,9 142:8 159:24 173:22	<b>lost</b> 137:5,5 144:11 257:11 <b>lot</b> 26:5 30:16 31:16 66:2 137:9 180:17 189:22 223:17 247:19,20 275:19 282:14 <b>louise</b> 1:9 <b>low</b> 75:23 95:14 114:8 249:13 250:9,18 251:8 261:19 283:1,9 289:17 296:8,12 <b>lowdensity</b> 168:15 <b>lower</b> 179:11 246:7 267:18,22,23 280:14 289:17,19 292:14,19 <b>lowest</b> 115:11 176:1,2 <b>lowman</b> 295:12 <b>lowrisk</b> 250:14 251:1 <b>lucente</b> 37:14 <b>lunch</b> 155:16 177:17 <b>lynn</b> 1:6 <b>lysis</b> 180:1
<b>M</b>				
<b>m</b> 1:21,23,23 5:4 56:2,2 96:12,12 155:21,21 177:18 177:18 215:6,6 266:13,13 299:24 300:9 301:6 303:15 <b>machine</b> 142:16 143:9 <b>maher</b> 295:18 <b>major</b> 21:6 <b>majority</b> 195:9 <b>making</b> 73:23 113:15 117:9,22 196:9 197:16 254:11				

Jaime Sepulveda, M.D.

Page 325

<b>malpractice</b> 7:13 8:2 9:5	249:1 252:3,9 254:3,23 255:20 286:20	159:10 188:10 189:19 199:16 201:19 208:11,12 209:2 232:10	45:11 146:10,12 171:9 174:1 273:24 277:23 278:12 279:14 280:5,11,19	<b>meetings</b> 61:12 125:2
<b>managed</b> 33:16				<b>memory</b> 82:10
<b>management</b> 270:7	<b>marketed</b> 230:24	<b>matter</b> 37:18 169:3	<b>mechanically</b> 79:18	<b>menahem</b> 279:2
<b>manager</b> 27:12 244:4,7	231:12,16 234:2 286:16	172:10 178:8 207:1 210:1,3	88:11 135:21,23 136:2,14 138:10 138:16,18 140:5 141:7 143:6 144:1 144:8,20 145:11 145:23 146:23 148:4 153:19 154:6	<b>mention</b> 68:4 69:14 174:5 295:17
<b>mandated</b> 228:19	<b>marketing</b> 24:17	<b>matters</b> 39:17		<b>mentioned</b> 8:21 11:5,8 31:6,9 47:23 62:19,20 63:15 65:6 72:21 76:11 86:22 87:21 89:6,14 91:1 96:22,24 97:2 110:23 137:12 147:24 172:17 201:18 221:7 238:5 266:17 267:6 271:18 272:4,22 280:7 289:13 292:12,21
<b>manner</b> 16:6 25:24	114:17 209:2	<b>maturing</b> 192:20		
<b>manual</b> 17:6,8,10 18:9,12	231:2,6,20 232:1 232:1,1,4 254:10	<b>max</b> 276:23		
<b>manufactured</b> 203:10,18	<b>marking</b> 37:16	<b>maximum</b> 271:11		
<b>manufacturer</b> 100:8 101:2 113:17 114:12,22 115:16,21 116:21 117:12,20 118:14 118:22,23 119:5 119:12 263:12	44:5 47:2 48:20 49:3,10 50:3 51:4 53:20 54:16 71:1	<b>mdl</b> 1:4 56:9 61:10 61:15,18		
<b>manufacturers</b> 33:22 114:3	<b>marlex</b> 131:8,11 132:1 188:9	<b>meals</b> 23:13	<b>mechanics</b> 276:12	<b>mentions</b> 61:1
<b>march</b> 1:22	<b>mary</b> 1:14	<b>mean</b> 31:17 38:9 41:5 42:15 68:19 75:22 105:4 106:22 109:15 115:1 116:5 142:18 148:24 152:18 156:13 166:18 170:6 172:23 179:8,18 194:9 198:14 200:19 201:2 207:6 208:7 223:14,16 232:2 243:2 244:2 247:7 254:10 257:17 258:9 261:22 264:8	<b>mechanism</b> 213:4	<b>mersilene</b> 188:9
<b>marcus</b> 133:23 256:15	<b>mass</b> 8:4,5 9:15 10:4 183:22	115:1 116:5 142:18 148:24 152:18 156:13 166:18 170:6 172:23 179:8,18 194:9 198:14 200:19 201:2 207:6 208:7 223:14,16 232:2 243:2 244:2 247:7 254:10 257:17 258:9 261:22 264:8	<b>mediating</b> 181:16	<b>mesh</b> 7:9 29:19,20 33:21 34:1 44:15 47:24 83:4 87:7 88:11,11,11,12 89:17,19 90:22 92:1,9,13 93:2 94:22,23 95:3,6,7 97:10,17 99:13 100:2,8,13 101:7 101:9,16 102:12 104:3,24 106:13 106:18,18 107:4 107:19 108:6,18 109:8,12,18 110:5 111:15 112:24 113:4,17,19 114:3 114:6,12,22 115:17 124:22 126:2 131:7,11 132:10,24,24 133:8,10,23 134:3 134:5,5,6,15,18 136:3,3,14,15 137:18 138:19
<b>margaret</b> 1:11	<b>master</b> 1:3	142:18 148:24 152:18 156:13 166:18 170:6 172:23 179:8,18 194:9 198:14 200:19 201:2 207:6 208:7 223:14,16 232:2 243:2 244:2 247:7 254:10 257:17 258:9 261:22 264:8	<b>medical</b> 3:15 4:4 7:13 8:2 9:5 10:21 18:4 19:5 32:7 33:3,11,23 39:18 40:2,4,7 43:22 44:2 51:4,8 51:10 52:1 62:10 71:24 77:14 79:23 80:12 81:14 98:22 99:6,7,16 100:5 103:10,22 118:17 119:10 124:12 144:18 154:10 155:1 204:23 205:5 207:14 210:6,15 214:2 225:21 230:23 254:1,21 263:12 273:14 274:18	
<b>mark</b> 2:8,9 36:23 37:4 38:10,14 39:13,20,22 40:1 41:14 43:22 45:7 45:20 46:14 48:13 48:18 49:21 50:2 52:10 53:16 66:7 68:20 70:23	<b>match</b> 188:16	200:19 201:2 207:6 208:7 223:14,16 232:2 243:2 244:2 247:7 254:10 257:17 258:9 261:22 264:8		
<b>marked</b> 43:14,19 44:7 46:1,18 47:3 49:1,8,12,16 50:9 51:6 52:16 53:18 54:13 55:2,4,11 55:14 60:19 64:8 64:11 65:21 67:21 71:4	<b>material</b> 4:15 47:13 47:14 75:12 79:4 79:6 102:6 109:7 109:17,19,24,24 110:3,7,7,13,14 110:16,20 127:9 127:13,14 142:4 158:17,22 162:13 163:16 167:12 175:1,15,16 185:21 190:15 191:7 196:11,12 196:14,16 198:3 203:15 215:23 229:3 262:1 282:7 287:19	<b>meaning</b> 237:3		
<b>market</b> 104:17 154:12 155:3 210:16,17,19 211:3 238:22,23 239:16,19 243:2	<b>materials</b> 3:22,23 4:1,2 35:6,7,8,21 37:22 38:6 40:21 41:5 44:16,17 47:13,14 48:1,3,8 48:22,23 49:13 50:6 66:3 70:17 71:17 75:8 101:20 102:13,18,21	<b>means</b> 57:9 111:4 148:21 159:21 176:21 179:9,20 179:20 232:4	<b>medically</b> 144:16 144:16,17	
		<b>measure</b> 193:4 227:24 230:19,21	<b>medicare</b> 269:21 270:11	
		<b>measurement</b> 149:15 217:11 226:21	<b>medicine</b> 30:13 275:1	
		<b>measurements</b> 227:23	<b>medscan</b> 209:13	
		<b>measures</b> 226:10	<b>meet</b> 17:1 236:1	
		<b>measuring</b> 196:24	<b>meeting</b> 61:12 223:14	
		<b>mechanical</b> 3:16		

Jaime Sepulveda, M.D.

Page 326

139:8 140:6 141:8 142:1 143:1,5,6 143:22 144:1,2,9 144:21,21 145:10 145:11,24 146:15 146:22,24 148:3,5 151:17 153:19,19 157:24 158:5 159:2,4 160:11 162:10,10 163:23 173:1 175:13,19 175:21 176:5 181:23,24 182:9 182:10 183:17 184:13,14 185:2 185:15,23,24 186:7 187:7,8,19 187:19,22,23 188:20 189:2,4,14 189:14,17,18 190:1,2,15 191:3 191:12 194:16,17 195:1 199:23 200:6,14,15 214:20 215:13,21 216:23 217:6,10 217:12,20 219:1 219:23 220:13,13 220:15,18,20 221:8,9,24 222:1 222:16,17,23,23 223:10,11,16 224:3,22 225:15 227:3,15 228:2,19 236:9,13,19,20 237:3,3,9 243:1 244:23 245:8,9,15 245:20 246:4,5,5 246:6,8,9,15,16 249:7 250:4 251:7 261:6,14,18 262:4 262:9,9 263:7,10 270:19 274:12 277:23 279:1,19 280:4,5,10,12,19 281:5,10,12,22,23	281:24 282:2,5,16 283:22 286:12 287:1 289:24 290:2,20,23 291:3 291:7,12,13,16 292:3 293:15,18 293:20 294:2,2,6 294:14,17 295:12 296:8,14 297:7,8 297:8,11,11 <b>meshbased</b> 298:6 <b>meshes</b> 36:13 101:18 103:15 104:8 105:2 138:18 146:10 162:12 163:5 172:17 184:17 186:9 187:12 192:19 195:7 221:3,3 223:17 229:19 290:9,15 290:20 291:10 298:13 <b>meshs</b> 140:5 145:22 <b>message</b> 27:16,19 <b>met</b> 98:16 161:17 <b>metanalysis</b> 296:2 <b>meter</b> 184:8 <b>method</b> 180:1,9 183:9 184:20 242:17,17,20 <b>methodologies</b> 273:8 <b>methodology</b> 116:18 119:8 204:19 <b>methods</b> 104:19,19 180:23 242:21 <b>miami</b> 1:24 23:7,9 23:11 71:23,24 <b>mickey</b> 29:15 <b>microns</b> 291:2 <b>microscope</b> 200:5 <b>microscopic</b> 106:17 161:6 186:22 <b>microscopically</b>	187:2 <b>mid</b> 154:8 <b>midline</b> 87:16 <b>midurethra</b> 85:20 <b>midurethral</b> 51:13 72:24 73:4,6,18 73:19 74:1,9,23 80:6 81:18 82:8 84:15,21 85:4 86:5,23 95:11 97:9,16 188:13 201:22 202:18 236:16 265:15,20 278:5 281:20 288:21 <b>migrate</b> 144:11 <b>miles</b> 24:3 <b>millimeter</b> 183:24 184:7 <b>millimeters</b> 184:1 <b>million</b> 21:14 283:2 283:3,3 <b>mind</b> 75:18 81:21 179:17 215:2 241:6 280:17 <b>mindful</b> 11:11 <b>minimum</b> 143:22 <b>minority</b> 283:22 <b>minute</b> 140:12 <b>miracle</b> 1:8 <b>misleading</b> 83:9 135:12 <b>misleads</b> 263:3 <b>misrepresent</b> 229:14,16,17 <b>missed</b> 148:23 <b>missing</b> 35:11 37:11 <b>misspoke</b> 184:5,7 227:6 <b>misstates</b> 170:16 177:4 178:18 182:16 193:8 220:2 231:23 233:16 234:7 239:11,20 250:15	259:22 261:9 <b>misstating</b> 170:18 <b>mistake</b> 254:3,23 255:2,7,18 <b>mmhmm</b> 16:19 17:4 18:1,6 23:22 24:19 25:2 26:17 28:19 <b>model</b> 144:7 195:16 218:11 <b>moderate</b> 251:9 <b>modify</b> 251:13 <b>modules</b> 255:10 <b>molecular</b> 181:10 285:22 <b>moment</b> 69:22 103:20 <b>monarc</b> 72:19,20 <b>money</b> 267:7,8 <b>monitors</b> 104:6 <b>monograph</b> 3:14 35:9 38:22 40:20 40:20 41:7 43:18 <b>months</b> 244:17 <b>morbid</b> 80:22 <b>morbidity</b> 81:5 <b>morning</b> 156:20 <b>mostyn</b> 2:6 <b>mostynlaw</b> 2:9 <b>mouse</b> 181:3 <b>mouth</b> 195:24 <b>move</b> 32:3 79:7 235:15 <b>moves</b> 85:13 <b>moving</b> 179:6 <b>msds</b> 196:8,8,11,20 197:18 198:7,12 198:13 202:23,23 287:3 <b>mulberry</b> 211:5,7 <b>multicenter</b> 254:19 255:11 256:11 <b>multiple</b> 42:17 132:3 139:22 243:14 277:2,3 297:5 298:1	<b>muscle</b> 82:23 83:2 83:5 84:1 92:18 181:20 <hr/> <b>N</b> <hr/> <b>n</b> 3:2 5:1 46:24 <b>name</b> 5:11,20 11:24 12:3,24 34:7 66:14,19 67:8 131:3 166:18 167:1 253:22,24 278:19,20 <b>names</b> 34:2 103:1 147:24 <b>nancy</b> 1:15 <b>native</b> 80:11,16 81:15 134:10 157:1 173:13 174:10 219:9 228:2,16,19 232:11 246:14,19 246:24 252:1,12 264:14,17 265:4 292:15,21 293:15 294:16 296:15,24 297:20 298:3,8,13 <b>natural</b> 31:8 <b>nature</b> 117:7,8 198:19 248:5 <b>neatly</b> 60:3 <b>necessarily</b> 30:24 118:22 120:16 127:13 128:2 192:4 221:16 242:23 254:14 267:8 <b>necessary</b> 107:5 <b>necrotic</b> 182:1 <b>necrotized</b> 181:22 182:9 <b>need</b> 6:18 16:12 21:19 24:12 26:14 26:14 27:15,16 28:15,15,16,16 43:9 50:13 52:5 53:2 54:10 79:7
--	---	--	---	--

80:20 100:16 114:18,19 115:5 115:21 119:14 123:19 138:24 142:7,10,20 146:7 146:13 148:16 150:21 151:6 154:18 165:9 169:8 179:3,4 191:4 195:19 199:24 213:10 226:4 229:9 232:13 236:8 237:1 243:11 248:21 249:16 252:8,8 272:11,11 276:10 299:19 <b>needed</b> 123:9 153:8 228:13 <b>needle</b> 78:13,13 99:21 141:21 <b>needles</b> 99:8,9 101:24 <b>needs</b> 13:3 15:11 26:15 54:4 106:2 114:15 115:2 119:6,16,17 120:23 140:21 141:11,14,18,23 149:2 154:7 169:15 201:3 254:19 <b>negative</b> 182:19 <b>nerve</b> 104:7,7 <b>neuman</b> 278:20 279:18 280:10 <b>neumans</b> 279:2 <b>neutralize</b> 180:20 180:21 <b>neutrophils</b> 190:6 <b>never</b> 12:13 22:5,5 23:2,2,2 24:17 25:23 26:8 28:17 30:2 33:24 65:1 66:13 81:13 95:4 97:4 102:5,7,7	115:19,20 132:7,8 138:9,14 139:15 143:11,24 144:13 180:6 200:7 209:20 226:13 227:8,8 229:1,2 243:10 263:15 267:17 277:8,8 278:10 <b>new</b> 22:24 31:4 32:12 38:23,23 155:11 179:7 218:23 235:4 <b>newer</b> 39:9,11 <b>nice</b> 48:13 235:24 236:2,4 <b>nicita</b> 131:17,19,19 <b>nils</b> 2:14 <b>nilsson</b> 147:23 148:2 208:1,19,24 <b>nineyear</b> 270:18 <b>nod</b> 6:10 <b>non</b> 159:21,23 290:11 <b>nonabsorbable</b> 158:3 <b>noncarcinogenic</b> 289:3 <b>nondegraded</b> 159:24 <b>nonmesh</b> 90:24 133:9,11 134:20 245:16,22 <b>nonreactive</b> 158:18 159:4,14,21 160:6 <b>nonspecific</b> 250:20 <b>noon</b> 155:17 <b>normal</b> 13:13 138:3 161:2 168:12 181:2 192:8 214:21 215:22 <b>normally</b> 172:24 <b>northwest</b> 23:4 <b>notary</b> 300:7,17 301:22 303:22 <b>note</b> 43:5,9 59:4	64:23 66:1 <b>noted</b> 303:11 <b>notes</b> 64:21 65:1,2 65:4 266:6 301:10 304:1 <b>noticeably</b> 214:21 215:22 <b>novo</b> 295:2,2,20 <b>number</b> 21:11 59:16 60:11 83:18 84:18 94:2 132:11 132:13 133:13 139:11,12 157:14 164:12 168:14 174:1,2 179:3,9 186:24 189:18 190:6 196:3,5 198:17 225:5 226:20 232:24 255:10 265:3 267:16,17,24 268:11 271:12 273:9 277:5 295:23 <b>numbers</b> 22:7,17 48:2 63:9 267:19 268:6,7,8 299:3 <b>numerous</b> 263:19 275:23 288:15 <hr/> <b>O</b> <hr/> <b>o</b> 5:1 <b>oath</b> 3:6 300:2 <b>ob</b> 125:1 181:9 <b>object</b> 29:23 115:24 127:20 167:15 190:20 193:8 236:14 239:8,18 <b>objection</b> 22:12 27:7,21 28:7 57:8 57:9 78:23 107:8 107:23 108:22 109:21 110:19 113:20 114:7 115:23 116:6 118:9,19 126:14	126:22 128:12 129:1,9,20 132:15 134:21 138:23 140:11,13 141:12 141:12 142:12 146:2 147:3,13 152:24 153:3 155:4 159:16 160:7 162:14 169:17 170:15 178:4 191:13 206:7 217:2 220:1 226:15 230:12 232:21 233:5,12 234:7 239:11,20 240:12 248:2 250:15 254:7,17 260:9 262:7,7,17 263:3,9,17 264:12 <b>objections</b> 232:16 261:17 264:6 <b>objective</b> 217:11 <b>obligation</b> 129:18 <b>obligations</b> 212:11 <b>observation</b> 139:10 149:9 150:17 <b>observed</b> 102:22 <b>obstruction</b> 81:6 144:24 <b>obtaining</b> 114:5 <b>obturator</b> 82:23 83:1,5,24 <b>obviously</b> 19:2 25:19 41:12 44:10 59:9 66:4 67:8 92:18 175:2 214:10 252:9 280:22 291:8 299:6 <b>occasionally</b> 22:24 <b>occur</b> 217:6 <b>occurred</b> 22:21 <b>occurring</b> 173:12 <b>offer</b> 122:23 153:17 250:12 252:22 <b>office</b> 2:12 35:15	73:14 <b>oh</b> 28:17 33:6 48:12 51:3 69:24 110:9 157:9 235:23 243:10 256:8 293:9 <b>okay</b> 5:10 6:11,22 7:6,9,12,15,21 8:6 8:16,23 9:7,12,16 9:24 10:7,12,13 10:16 11:2,2,18 12:5,7 13:5,8,10 13:13,17,21,23 14:5,17,20 15:1,5 15:13 16:1,3,6,13 17:8,14 18:6,21 19:9,23,23 20:12 21:13 22:9 23:12 24:4 25:11 26:7 27:1 28:5 29:5 30:4 32:3 33:17 34:9,12,22 35:1 35:10,19 36:1,9 36:14,14,17,21 37:8,15 38:8 39:6 39:20 40:3,11 41:24 42:21 43:3 44:13,19 45:6,17 45:19 46:14 47:10 47:12,18 48:4,6 48:12 50:24 51:3 51:15,19,23 52:4 52:10,23 53:6,15 54:3,9,15 55:1,13 55:20 56:17 57:21 59:15 60:5,9,14 61:11,19,23 62:7 62:12,23 63:8,15 64:7,10,17 65:1,3 65:13 66:11 67:10 67:15 68:22 69:19 69:20,23 71:6,21 72:12,17 73:13,23 75:24 76:2,11,18 76:23 77:17 79:17 82:6,11,24 83:7
---	--	--	--	---



Jaime Sepulveda, M.D.

Page 328

83:23 84:14,20,24 86:4,18 87:12 88:8,20 89:13 90:19,21 94:2,5 94:14 95:17,21 96:8,14 97:22 98:2,6 99:15 106:3,24 107:20 109:6 110:23 111:11,23 112:11 112:21 115:12,15 117:11 118:8,21 119:23 120:4 121:12 122:1,23 123:16 124:8,11 125:23 131:6 135:6 139:9 142:15 143:4 144:20 145:20 146:6,22 149:5 150:11 155:11,12 155:14,14 156:13 156:15 157:9,12 157:16,19 159:12 160:3 161:3 162:18 165:20 166:15 167:9,19 168:7 170:5,10,12 171:2,11,17,23 176:24 179:6 181:12 183:6 184:6,9 185:10,11 186:1,5 187:15,21 188:5,23 189:24 190:14 193:5 194:5,22 195:10 195:18 196:7,16 197:7 198:4,6 199:23 200:12,24 201:4,16 202:21 203:21 204:5,7 206:22,23 207:6 210:2,5 214:1,15 214:18 216:21 217:21 218:2,13 220:5,11 222:12	222:14,20 223:3 230:23 233:2 235:2 237:6 239:10 244:10,20 246:6 251:21,23 251:23 253:23 257:19,23 258:18 260:13 262:11 263:11,24 264:8 264:17 265:7 266:5,15 268:1,1 268:13,13,22 270:10 299:16 <b>once</b> 23:4 67:8 74:12 122:12 129:12 154:5,5 157:22 182:17,17 230:14 249:4 275:14 <b>oneinamillion</b> 115:18 <b>ones</b> 8:21 35:17 37:2 91:11 100:4 107:7,22 116:12 124:6,7 134:3 145:18 169:20,21 183:6,7 213:10 275:18 <b>open</b> 42:3 49:24 54:12 67:8 87:10 104:10 173:16 174:7 <b>opens</b> 175:22 <b>operate</b> 134:2 <b>operating</b> 16:18 25:16 91:10 93:19 99:2 101:22 102:4 104:11 120:24 244:5 <b>opine</b> 235:11,11 <b>opined</b> 122:3 189:13 194:16 <b>opinion</b> 4:10,12 44:14 64:17 90:4 101:14 102:23 109:11 117:21	122:23 123:3,5,7 129:4 133:7 134:17,22 135:15 139:4,6,19 148:11 153:17 154:4 177:1,5,9 183:2 183:14 194:4,20 195:19 202:22 212:8 216:16,20 229:10 233:24 234:10 235:1,6,9 235:18 249:20 252:18,20,21,24 254:18 256:13 277:17 279:23,24 280:2,22 281:4 283:4,14 285:4,11 286:12,22 289:2 294:18 <b>opinions</b> 5:14 12:16 36:10 46:12 52:2 56:7,18,23 57:5,17,22,22 59:2,8,11 60:17 60:23 61:24 63:12 64:22 65:4 70:5,6 70:10,11,19 71:12 71:14,19 140:24 145:22 183:16 187:18 234:21 263:18 269:14 272:8,10 273:13 275:8,20,21 285:12,15 296:4 <b>opportunities</b> 277:11 <b>opportunity</b> 14:1 14:15 18:17 199:5 235:3 <b>opposed</b> 6:9 57:23 58:4 72:24 74:1 78:1 90:24 95:18 148:3 183:18 194:18 216:9 <b>opposite</b> 224:12 <b>optimal</b> 204:2	<b>option</b> 73:19 74:2 228:18 <b>options</b> 228:15 <b>order</b> 269:4 273:19 273:19 <b>orders</b> 237:18,21 238:3,13,17 240:11 241:7,9 <b>organ</b> 29:20 88:21 90:6,17,23 92:1 93:3 94:22 97:10 97:17 104:23 134:18 188:6,21 189:5 225:16 229:20 236:21 237:4 243:1 244:24 245:17,21 245:23 246:7,9 249:7 250:4 251:6 <b>organisms</b> 3:19,21 46:5 <b>organization</b> 237:13 247:10 <b>organized</b> 18:7 60:3 <b>orientation</b> 83:8 <b>original</b> 41:19 43:17 47:11 147:19,20 207:23 <b>originally</b> 65:7 156:11 <b>originals</b> 41:12 <b>orlando</b> 276:20 <b>ought</b> 38:10 <b>oumlautchsner</b> 47:1 <b>outcome</b> 172:14,15 <b>outcomes</b> 177:14 246:15 252:17 253:4 <b>outside</b> 13:10 97:4 171:22 212:8 <b>outsidein</b> 72:14,15 211:9,13 <b>outweighs</b> 83:3 <b>ovarian</b> 289:18,19	<b>overactive</b> 32:19 <b>overall</b> 54:23 254:1 254:21 <b>overbroad</b> 101:4 109:10 112:14 113:20 114:14 115:3 121:17 132:15 159:8,16 190:21 204:16 205:7,19 210:11 236:14 <b>overlay</b> 180:9 <b>overtension</b> 154:18 <b>overtensioned</b> 152:16 <b>overtensioning</b> 149:13 <b>overwhelmed</b> 108:13 <b>overwhelming</b> 202:15 272:4 <b>owned</b> 209:13 <b>oxidative</b> 167:13 <b>oxidizers</b> 171:17 196:18
<b>P</b>				
<b>p</b> 1:23 5:1 155:21 177:18,18 215:6,6 266:13,13 299:24 <b>package</b> 102:4 <b>packaging</b> 102:2,3 <b>page</b> 3:3,11 48:2 96:19 270:2 279:4 279:18 288:4,11 291:21 293:12 294:23 297:24 302:4 304:2 <b>pages</b> 42:19 97:7 278:13 301:8 303:6 <b>paid</b> 205:17 206:5 206:9,9 256:21,24 261:4 <b>pain</b> 86:2,4 88:6,7 93:1,4,4,24 94:6				

94:19,21,24 95:10 95:13 144:12 178:22 224:19 225:2,2 291:18 293:22 295:3,3 297:2 <b>pamela</b> 1:6 <b>panel</b> 105:10 134:23 <b>paper</b> 35:11 37:13 50:17 52:7 104:12 131:8 168:6,10,11 168:12 193:1 226:18 253:3 271:9 272:3 282:22,24 284:11 288:19 290:13 293:10 294:20 295:12 <b>papers</b> 34:15 51:22 58:18 62:5 135:2 140:3 193:17,18 202:16 219:8 226:17 227:20 235:17,18,20 253:6 271:20 272:6 <b>paragenicity</b> 100:22 <b>paragraph</b> 288:13 <b>parameters</b> 109:2 <b>parcel</b> 66:5 <b>part</b> 12:16 17:21 18:10 34:12 57:20 66:4 107:11 152:1 154:16 164:11 176:4 196:7 197:4 213:21 215:11 240:21 242:13,14 288:19 294:18 <b>partial</b> 290:16,17 <b>partially</b> 159:20 <b>particle</b> 140:14 <b>particles</b> 136:4,16 136:18 137:5 138:10,20 140:7	141:8 144:9,11 <b>particular</b> 9:8 14:8 19:11 36:9,15 37:16 46:16 56:23 120:6 135:7,9 188:19 200:8 202:9 210:2 214:3 252:24 <b>particularly</b> 298:7 <b>parties</b> 301:13,14 <b>parts</b> 164:2 <b>pass</b> 268:22 <b>passage</b> 36:15 <b>passages</b> 46:9 47:6 <b>passion</b> 98:19 <b>patent</b> 99:18 <b>patents</b> 100:5 <b>pathology</b> 105:19 105:24 106:2,22 <b>patient</b> 29:18 30:21 31:3 51:12 66:15 66:19 67:4 68:11 69:8 73:14,21,23 75:21 82:3,4 85:12,17,17 86:10 87:14,16 88:2 93:1 94:20 95:10 107:4,5,16 108:5 108:5,12,20 109:3 109:9,11,14,20 111:7,23 112:1,6 112:8,12,15,22 113:12,14 117:16 118:4,12 119:4 137:10,12 139:10 153:9,10,13,13 160:2 185:1 187:23 210:6 218:18,20 221:24 225:3 233:4 255:15 264:7,10 265:8,10,16 <b>patientidentifying</b> 68:7 <b>patientprotected</b> 68:14	<b>patients</b> 20:22 31:4 73:20 74:3 80:22 84:10,10 91:3,3,4 91:5,7,9,20 93:2 95:1 99:3 107:15 107:22 108:3 109:7 111:14 112:3,15,17,17 117:18 121:4 134:2 166:9,10 173:6 175:7 179:4 187:7 190:15 195:13 200:9,14 217:15 222:16 223:10 243:3 245:16,17 247:15 254:24 255:11,23 269:10 270:24 271:2,3,14,21,23 272:17 273:7,9 276:22 277:21 288:21 289:4,13 294:13 297:9 <b>paula</b> 1:16 <b>pay</b> 157:14 206:13 272:8 <b>payments</b> 156:7 157:5,15 <b>peculiar</b> 199:6 <b>peers</b> 14:11 15:7 <b>pelvic</b> 1:3 8:4 9:14 10:4 29:20 30:13 88:21 90:6,17,23 92:1 93:3 94:22 95:10 97:10,17 104:23 134:18 187:8 188:6,21 189:4 216:8,24 225:16 229:20 236:21 237:4 243:1 244:24 245:17,21,22 246:7,9 249:7 250:4 251:6 276:2 277:6 294:21 295:2	<b>pelvis</b> 99:11 279:16 287:10 <b>pending</b> 6:20 <b>pennsylvania</b> 2:13 <b>people</b> 24:17 31:12 31:23 117:6,21 213:8,9 252:16 267:1 272:13,13 274:24 275:5,5 <b>peoples</b> 42:17 <b>perceived</b> 218:7 <b>percent</b> 40:19 83:19 148:22 149:3,17 150:5 152:19 258:3 265:23 270:20 271:4,6,10,10,11 271:12,13 <b>percentage</b> 30:10 81:14 130:19 258:10 <b>percentages</b> 278:21 <b>perfect</b> 68:18 87:5 <b>perfectly</b> 79:16 <b>perform</b> 26:1 61:24 72:1,23 73:1,3,15 73:17 77:10 123:19 125:10,13 146:21 206:17 238:17 283:6 <b>performance</b> 147:16 148:16 277:15 291:5 <b>performed</b> 61:5 65:13 72:6,7,21 76:12,15 80:15 81:19 85:14 88:1 88:20,23,24 91:23 92:24 94:16 125:24 126:4 143:4,11 144:1,7 146:11 200:2 201:5,7,9 212:4 <b>performing</b> 61:8 73:6 205:17 206:4 229:13	<b>performs</b> 73:9,9 229:16,17 <b>perineoplasty</b> 89:5 <b>period</b> 88:15 222:24 <b>periods</b> 135:13 <b>permanent</b> 119:19 119:21,24 120:8 120:15,17 160:12 217:15 <b>permanente</b> 269:24 270:12 <b>peroxide</b> 171:17 197:1,4 <b>peroxides</b> 196:18 196:21 197:18 <b>person</b> 17:17 75:18 137:15,16 164:16 207:10 254:11 259:23 <b>personal</b> 31:11 79:12 150:17 285:15 286:1 <b>personally</b> 9:4 25:23 85:5 99:5 106:12,14,19 125:18 137:4 150:12 300:10 <b>personically</b> 135:24 <b>perspective</b> 141:6 242:7 <b>pertain</b> 262:19 <b>pertains</b> 19:3 120:6 128:13 129:11 147:16 163:12 <b>peter</b> 2:5,5 5:20 35:14 47:20 67:1 <b>petition</b> 241:7,11 242:15 <b>petros</b> 208:15,24 <b>pharmaceutical</b> 32:7,21 33:3,10 <b>pharmaceuticals</b> 32:8,9,14 <b>pharmaco</b> 285:22
---	---	--	---	---

<b>pharmacology</b> 181:10 285:23	195:21 207:13 213:4 217:15	261:11	173:8 175:1 176:4 176:12,21 179:24	89:8 295:14
<b>phenomenon</b> 29:22 170:14 286:7	226:6 231:21 262:20 267:2	<b>plenty</b> 252:22	180:14 181:3,20 182:14 183:13	<b>postoperative</b> 295:20
<b>physical</b> 172:14	<b>placed</b> 85:9,21 88:10 136:10	<b>pliability</b> 224:21 225:1,2,4,6,13 226:16,19 230:4 293:18,20,24 294:3,3	185:21 196:9,17 197:15 198:8,16 198:18,19 201:10 201:18 202:17 203:9,12,13,17,20 217:16 261:21,24 287:4,5,14,16,21 288:6,15 289:7 290:17 292:11	<b>postoperatively</b> 150:23 151:2,8 227:4,16
<b>physician</b> 7:8 13:2 29:21 31:12 47:23 78:14 79:4 80:3 80:15 98:15 107:3 107:5 108:4 109:3 109:6 111:13 113:3,5,7 114:4 114:11,15 119:4 196:21 197:2 203:23 204:5,7,14 204:22 207:3 212:14 214:1 219:14	137:18 159:11 164:17 172:11 192:7 225:7 246:6 295:12 <b>placement</b> 141:24 143:21 <b>placing</b> 143:8 160:2 208:10 <b>plaintiff</b> 7:22 11:14 12:13,16 <b>plaintiffs</b> 1:5 2:2 5:22 43:14,19 44:7 46:1,18 47:3 49:1,8,16 50:9 51:6 52:16 53:18 54:13 55:4,11 59:5 60:19 71:4 236:1 271:18 281:21 282:20 299:8,9	<b>pliable</b> 208:12 214:21 215:14,15 215:21 225:6,9,22 <b>plication</b> 264:23 <b>point</b> 27:5 28:15 116:13 130:11,23 131:14 132:6,9,11 133:15 161:1 177:16 185:4 189:21,22 193:13 207:20 220:9 240:2 241:5 242:10 248:6,17 250:3 255:17 258:16 267:16 268:20 281:17 284:3 292:8	290:17 292:11 <b>pool</b> 180:13 <b>poor</b> 173:18 174:3 <b>poorly</b> 284:2 <b>pop</b> 47:24 <b>population</b> 202:19 202:20 <b>pore</b> 184:19,19 188:14 274:1 281:5,10,22,24 289:24 290:2,10 290:17,23 291:1 291:10 292:2	<b>potential</b> 21:6 144:10 207:7 224:21 227:5,17 265:10 291:9 <b>potentially</b> 260:19 <b>powder</b> 198:9 202:24 287:22,24 <b>power</b> 242:2 256:8 <b>powerpoint</b> 67:3 <b>ppxt</b> 67:4 <b>practice</b> 23:5 71:22 74:4,21 78:5 95:2 95:22 137:6 138:12 209:7
<b>physicians</b> 20:8 25:13 31:7,19 78:10 107:17 110:6 113:16,23 115:22 117:1 129:13 143:1 149:11,19 150:19 187:18 219:1 221:15 223:18 228:8 241:6,8 249:24 262:14	<b>plan</b> 297:17 298:5 298:11,16,16 299:11 <b>plane</b> 93:9 276:22 <b>planned</b> 58:16,21 58:22 59:2 <b>planning</b> 267:15 <b>plans</b> 299:5 <b>planus</b> 265:2 <b>plastic</b> 138:13 141:22 <b>plate</b> 181:1 <b>play</b> 107:13 132:21 <b>played</b> 114:24 115:19 116:23 117:13 118:16 <b>plays</b> 118:11 <b>please</b> 5:10 6:9,14 6:19 96:17 120:12 242:16 258:19	<b>points</b> 78:16 164:9 <b>polar</b> 140:20 <b>politicians</b> 259:11 <b>polyester</b> 173:9 175:17 <b>polymer</b> 105:12,13 106:7 <b>polymers</b> 105:14 105:16,17 <b>polypropylene</b> 89:19 91:24 92:9 97:8,9,16,17 104:24 105:18 106:11,13,18 107:4 110:7 144:22 158:1,3,8 158:9 162:19,22 163:6 164:5,7,12 165:23 166:4 167:6,14,24 168:2 168:15 169:11,21 171:12,18 172:8	<b>pores</b> 221:2 291:2 <b>portion</b> 17:16 19:14 31:14 82:19 82:20,22 83:17 120:13 162:3 163:10 <b>portions</b> 19:7 36:9 36:12 185:7 <b>posing</b> 75:12 <b>position</b> 286:11 <b>positioning</b> 95:18 <b>positive</b> 180:19 <b>possession</b> 66:3 <b>possibility</b> 222:11 222:13 <b>possible</b> 144:15,17 149:22 204:3 222:15,15,19 262:3,8 <b>possibly</b> 199:9 <b>posterior</b> 88:24	<b>preceptor</b> 3:12 24:9,12,15,16,18 24:22 25:2,6 40:23 41:16 43:13 276:9 277:4 <b>preceptors</b> 292:9 <b>preceptorships</b> 25:13 26:12,19 27:3 <b>precise</b> 93:16 94:3 <b>preclinical</b> 189:12 <b>preconceived</b> 205:6 205:9,12 <b>precursor</b> 260:11 <b>predicate</b> 240:5 <b>predict</b> 230:18 <b>predicting</b> 190:7 <b>predispose</b> 174:6,7 174:9 <b>predominantly</b> 282:12 <b>preface</b> 277:20 <b>prefer</b> 73:24 77:4 77:17 296:10 <b>preference</b> 20:19

112:16 <b>preferred</b> 20:24 77:1,7 <b>preparation</b> 63:15 64:4,22 185:18 <b>preparations</b> 199:16,17 <b>prepare</b> 60:2 63:19 69:11 <b>prepared</b> 19:20 60:16 62:14 63:1 63:6,16 65:7 235:6 296:21 <b>preparing</b> 60:23 124:12 <b>preponderance</b> 135:3 <b>presen</b> 220:14 <b>presence</b> 173:13 <b>present</b> 19:7 135:16 177:12,13 196:22 206:20 213:20 221:7 245:22 276:5 <b>presentation</b> 3:13 4:14 19:11 20:6 41:17 43:13 68:1 69:11,13,18 153:9 220:12,17 276:5 <b>presentations</b> 18:19 20:4,5,8,12 20:17 22:21 23:8 23:12 34:21 67:23 68:3 81:23 97:13 97:15 121:23 220:14,24 291:9 <b>presented</b> 22:20 96:19,23 157:8 165:7 214:1 240:22 255:10,10 255:11 285:21 299:2 <b>preservation</b> 148:21 <b>press</b> 46:8 <b>pressures</b> 75:20,22	75:23 <b>pretty</b> 44:15,20 89:12 284:24 <b>prevailing</b> 220:16 220:16 <b>previous</b> 265:19 <b>previously</b> 129:15 253:8 <b>primarily</b> 94:10 <b>primary</b> 31:12 130:11,23 131:14 210:16 253:10 <b>principal</b> 54:6 <b>principles</b> 146:17 <b>print</b> 156:11 <b>printed</b> 157:2 <b>prior</b> 129:1 231:22 250:15 253:20 257:3 263:3 <b>privatepractice</b> 30:20 <b>privileges</b> 9:1 71:22 243:19 <b>pro</b> 216:10 <b>probability</b> 144:19 <b>probably</b> 18:16 22:2 26:23 29:14 37:21 38:20 57:19 60:12 63:2 75:2 79:1 80:14,19 81:10 82:14 89:6 117:21 156:8 165:4 172:3,13 176:15 187:1,4 189:10 191:3 195:10 213:6 218:4 221:5,21 241:15 251:17 271:20 288:11 <b>problem</b> 174:14 175:7 217:22 218:1,3,4,5,8 247:13 <b>problems</b> 175:6 176:2 <b>procedure</b> 19:3	73:7 79:22 80:1,6 80:10,19,22 87:21 110:21 111:19 112:24 123:18 124:2 130:5 146:11,21 147:17 149:2 150:2 153:21 154:6 161:22 178:22 250:11 252:7 265:9 277:15 282:7 296:14 <b>procedures</b> 25:18 26:2 72:7 78:8 80:4 91:1 94:15 123:20 124:23 139:12 154:19 208:8 249:18 269:20 291:15 <b>proceeding</b> 153:14 <b>proceedings</b> 56:3 96:13 155:22 177:19 215:7 266:14 <b>process</b> 108:21 110:18 111:24 114:19 117:16 118:5 186:12,13 191:19 197:4,12 197:13,14 202:8 212:22 213:22 214:14 234:15 235:13 238:20,20 247:11 251:16 287:16 <b>produce</b> 60:11 206:5 <b>produced</b> 156:7 209:15 <b>produces</b> 197:3 <b>product</b> 16:8 24:24 33:14 48:15 58:14 59:3 61:9 68:4 69:14 77:22 89:23 101:3 102:10 107:6 108:7,19	109:9,19 113:4 114:1 120:6 124:7 128:13 129:4,11 132:20 154:12 155:3 162:7 203:6 203:18 206:12,13 206:15,17,18 207:16,18 210:16 210:18 212:14,16 213:1,14,15,18 214:1,4,5,16 219:12 221:19 223:22 229:12,13 232:6 234:1,4,5 234:17 241:8 244:4,7 251:24 253:11 254:15 255:19,20 258:15 260:12 262:16 263:2,6 <b>production</b> 156:6 <b>products</b> 1:3 5:19 14:4,12 15:7,23 15:23 16:8,14,21 18:23 19:8 20:9 20:10 22:20 24:9 28:6 56:8,19 61:18 63:12 90:1 100:9,13 101:7,9 102:12 110:5,16 111:16,21,22 113:6,19 114:6,13 114:23 116:22 121:16 122:5 123:2 124:6 125:12,13 126:3 127:10,17 128:6,9 129:8 132:10,18 133:8,10 158:21 159:2,4 162:9 209:8 213:19 238:22 241:18 243:21 244:13 274:15 276:12,18 277:17 279:8 <b>profession</b> 249:21	<b>professional</b> 27:11 45:3 121:13 249:20 251:12 275:24 300:6,7 301:3,4 <b>professor</b> 25:7 166:20 209:12 259:13 290:8,11 290:13 <b>professors</b> 166:24 <b>profile</b> 132:19 148:4 238:8 <b>profits</b> 210:6,12 <b>programs</b> 121:18 149:24 <b>progression</b> 219:12 223:8 <b>project</b> 54:7,8,11 204:23 <b>prolapse</b> 15:23 29:20 35:7 44:15 88:21 90:7,17,24 91:4 92:1 93:3 94:22 97:10,18 101:17 104:23 105:2 116:11 124:10 134:18 161:23 162:6 172:2 173:6 188:7 188:21 189:5 224:7,9,15 225:17 226:2 229:20 236:21 237:4 243:1 244:24 245:17,21,23 246:7,9 249:7,17 250:4 251:6,14 252:17 292:5 297:6 <b>prolene</b> 157:24 158:2,6,8,13 160:20 161:12 162:10,11,11,12 162:13,20,23 163:2,3,4,7,13,20 163:21,23 164:4
--	---	--	---	---

164:22 165:12,21 166:9 179:24 188:6,9,20 189:4 189:14,17 194:16 195:1 196:9 197:16 198:21 200:13 216:8,10 216:23 261:21,24 282:16 289:7 <b>prolenes</b> 177:1,23 <b>proliferate</b> 3:12 4:1,10 5:15 20:14,16 35:4,9 40:20 41:2 41:16 43:12,17 48:17 49:12,14 55:8 56:19 59:12 67:24 71:8,13 89:3 94:18 121:14 122:11,16 123:1 123:10 124:20 126:8,19 127:8,16 128:8,15,19,23 129:6 130:1,10,15 133:2 157:21 158:6,13 169:16 177:3 178:3 196:10 197:11,17 203:3 214:20 216:4 231:5,12,20 231:21 232:14 234:14,16,22 235:12,15 236:15 237:19 238:22 239:15 240:2,3 243:20 247:23 248:8,16 250:14 252:12 253:9 259:18 260:1,7,10 260:12,14 275:9 290:3 291:20 292:4,14 295:9 296:22 297:19,24 298:2,8 <b>proliferates</b> 95:24 232:19 <b>promised</b> 209:14	<b>prompt</b> 80:20 <b>proofread</b> 62:3,3 <b>proper</b> 142:3 147:12 148:18 150:6 154:11 155:2 281:5,10 <b>properly</b> 111:12 136:11 149:11 150:18 174:8,9 <b>properties</b> 3:16 45:11 159:6 <b>property</b> 159:6 <b>proposal</b> 18:9 <b>proposition</b> 78:20 154:24 <b>propounded</b> 303:9 <b>prosecution</b> 12:17 12:24 <b>prosimas</b> 4:11 5:15 20:14,15 44:22 55:9 56:19 59:12 71:8,13 121:15 122:11,16 123:1 123:11 124:20 126:8,19 127:8,16 128:8,16,19,23 129:7 130:1,11 133:5,23 157:21 158:6,13 169:16 177:3 178:3 196:10 197:11,17 203:4 214:20 216:4 237:19 238:22 239:16 240:2,3 243:20 247:3 248:8,16 250:14 251:24 252:6,10,11,16 253:4,11 255:9,15 255:16,16,18 256:16,19 257:3,7 258:1,22 292:5 296:22 297:19 298:8 <b>prosimas</b> 96:5 <b>prosthesis</b> 176:4	<b>prosthetic</b> 175:15 175:15 <b>protect</b> 204:11 <b>protection</b> 181:15 <b>prove</b> 199:12 <b>proved</b> 222:6,7 265:21 <b>proves</b> 284:19 <b>provide</b> 5:14,18 35:13 57:22 60:6 98:12 113:17 157:4 234:21 235:6 <b>provided</b> 24:7 35:14 65:7 68:9 241:19 254:24 255:23 299:12 <b>provides</b> 139:6 245:8 <b>providing</b> 56:18 114:22 <b>ps</b> 3:12 4:10 43:13 216:7,12 261:6,14 262:2 275:9 290:6 291:4 292:3,4,14 292:20 295:9 296:22 297:18 298:2,7 <b>pss</b> 95:21 <b>pubic</b> 82:16,20 <b>public</b> 115:22 300:8,17 301:22 303:22 <b>publication</b> 204:23 288:2 <b>publications</b> 46:23 97:14,15 <b>publish</b> 97:19 <b>published</b> 45:12 46:7,22 219:9 260:6 <b>publishing</b> 260:20 <b>pubourethral</b> 150:10 <b>pubovaginal</b> 75:19 75:21 80:11,15	81:15 <b>puerto</b> 33:19 <b>pull</b> 69:19 104:12 138:2 168:18 238:21 257:16 <b>pulled</b> 238:23 239:16,19 244:13 249:1 <b>purely</b> 115:24 116:6 161:6 <b>purported</b> 284:16 <b>purportedly</b> 282:22 <b>purpose</b> 13:23 106:20 111:23 180:15 204:24 210:16 <b>purposes</b> 18:22 51:24 52:18 67:10 67:15 166:16 <b>pursued</b> 216:23 <b>pursuing</b> 159:11 <b>put</b> 14:2 18:18 35:3 39:19 41:3 43:7 48:5 60:2 68:15 69:9 85:6,12,22 86:8,8 115:21 137:9 142:3 147:12 171:6 173:23 176:19 180:20 195:24 207:9 210:6,10 213:3 232:13,19 232:24 237:13,14 243:1,13 255:16 255:20 265:10,14 269:23 272:9,12 275:10 279:15 281:15 284:7 288:22 289:20 296:20 299:21 <b>puts</b> 28:22 233:3 <b>putting</b> 61:16,16,16 61:17 154:12 155:3 <b>pyramid</b> 272:13	<b>pyrogenicity</b> 182:17 183:12 <hr/> <b>Q</b> <b>qualities</b> 255:12 <b>quality</b> 121:4,7,10 210:20 <b>quantitative</b> 197:5 197:9 <b>quantitatively</b> 197:8 <b>quarter</b> 168:16 <b>question</b> 6:4,6,13 6:15,20,21 80:19 95:8 110:2,12 116:14 117:20 124:16,21 125:9 125:23 131:24 132:7,7 140:23 143:24 145:16,20 145:21 146:17 154:23 156:1,8 164:3 165:3,5 176:14,24 177:21 182:4 184:24 188:19 197:24 200:21,22 202:21 205:6 206:1 207:21 208:17 210:24 218:6 220:21 224:24 225:19 227:13,14 230:8 235:3 236:22 238:2 239:22 253:18 257:24 258:19 273:5 280:9 281:21 287:8,15 293:4,6,7 294:6 296:13,20 <b>questionnaires</b> 125:11 <b>questions</b> 6:9 8:23 74:5 93:16 112:16 122:10 169:7 235:10 268:14
--	---	--	---	--



Jaime Sepulveda, M.D.

Page 333

273:12 275:19 277:16 282:14 289:22 296:7 303:8 <b>quick</b> 50:1 59:20 96:10,18 <b>quicker</b> 73:7,8 <b>quite</b> 102:9 <b>quote</b> 152:5,7 153:7	229:24 230:2,2,3 257:6,24 265:22 270:19 271:3,5 280:11,13 289:4 289:10,19 292:19 293:14 297:15 <b>rates</b> 246:8 297:18 297:19 298:6,12 <b>rationale</b> 241:19,21 241:22 <b>rats</b> 198:8 199:4,4 199:5,8 287:21 <b>raviola</b> 156:5 <b>raw</b> 171:11,18 196:8,11,11,17 197:15 198:3,15 199:16 203:9,12 203:12,13,15,17 203:20 287:4,5,14 287:16,21 <b>rects</b> 115:20 179:1,2 238:6 <b>reaction</b> 78:21 159:22 164:19 183:13 186:6,10 186:11 187:3 190:2,17 191:10 191:17 192:19 264:19,22 <b>reactions</b> 124:1 <b>read</b> 32:2 57:3 65:1 65:11 67:8 90:9 98:15 103:11,11 103:11,12,12,14 103:16 105:1 106:9,15 114:20 120:14 124:14,14 125:4 130:3,3,4 162:2,4 163:11 167:4 189:8,10,11 194:4 196:20 204:1 215:16,19 216:15 235:1,22 236:12,22 237:20 237:23,24 249:19 272:11 273:19,19	273:21 274:5 286:10 303:5 <b>reading</b> 91:17 167:5 247:20 262:23 272:12 <b>ready</b> 62:17 266:8 299:2 <b>real</b> 49:24 59:19 180:21,22 207:4 248:12 268:6,8 <b>reality</b> 31:21 85:10 213:7 222:14 247:21 248:15 <b>really</b> 16:7 22:5 24:18 57:21 66:12 73:2 95:17 106:22 132:8 133:16 139:20 154:24 156:8 157:3 172:7 175:3 183:21 209:24 213:12 218:6 221:1 232:6 247:20 250:11 276:11 <b>realtime</b> 67:9 <b>reason</b> 20:17 28:24 48:1 73:22 77:21 80:9 83:14 85:24 88:18 91:10 93:23 94:4 112:5 162:5 172:13,24 174:19 251:15 259:2,12 260:23 302:6,8,10 302:12,14,16,18 302:20,22,24 <b>reasonable</b> 113:8 221:23 247:2,9,17 247:18,22 248:4 <b>reasons</b> 70:6,11 71:13 75:15 83:13 85:14 248:10 <b>recall</b> 8:10 12:4 13:17,20 23:22,24 27:24 28:20 32:23 34:2,9 56:15 72:12,14,17 74:7	82:10 85:15,19,24 86:9 103:17 137:23 156:6 167:4,5 198:11 212:1 269:8 271:16 278:19 280:3,7,8 286:16 287:22 292:16 293:19 <b>receive</b> 22:8 30:21 231:1 255:15 256:18 <b>received</b> 54:18 57:18,19 156:4 231:13 256:18 260:15,17 266:19 <b>receives</b> 244:6 260:14,18 <b>receiving</b> 112:23 <b>recess</b> 56:1 96:11 155:20 177:17 215:5 266:12 <b>reckless</b> 255:19 256:8,9,12 <b>recognize</b> 121:9 <b>recollect</b> 279:1 <b>recollection</b> 28:21 82:6 84:14 270:22 <b>recommend</b> 86:19 113:6 <b>recommendation</b> 148:17 237:5 <b>recommendations</b> 74:6 116:19 <b>recommended</b> 74:8 112:10 <b>recommending</b> 74:1 <b>reconsider</b> 242:16 252:8 <b>reconstructive</b> 87:3 <b>record</b> 5:11 6:11 43:4,6,11 44:9 51:24 52:19 53:7 56:5 57:10 59:4 59:22,22,23 60:11	66:1 67:11,16,19 71:1 96:15 120:13 155:24 161:24 162:3 163:10 177:21 215:17 266:10,16 269:6 272:17 301:9 <b>records</b> 22:9,10,16 62:10 157:4 <b>rectocele</b> 253:12 <b>recurrence</b> 224:7,9 224:15 297:1 298:6 <b>recurrent</b> 91:4,6 <b>recurring</b> 94:4 <b>redact</b> 66:23 67:6 68:16 <b>redacted</b> 66:20 68:9 <b>redone</b> 180:7 <b>reduce</b> 190:16 191:11 <b>reduced</b> 191:17 225:2 <b>reducing</b> 191:10 <b>reevaluate</b> 80:21 <b>reeves</b> 1:18 <b>refer</b> 52:5,14 253:22 <b>reference</b> 12:6 67:1 270:17 <b>referenced</b> 36:6,18 40:22 46:17 49:5 49:13 50:6 274:19 282:20 293:13 <b>referencing</b> 130:23 161:21 215:11 <b>referral</b> 271:17 <b>referred</b> 50:23 53:12 84:13 <b>referring</b> 52:8 166:1,3 234:19 <b>reflecting</b> 60:17 <b>regard</b> 16:7 28:6 101:9 115:8 124:19 191:7
--	---	---	---	--

Jaime Sepulveda, M.D.

Page 334

210:23 212:20 237:18 288:6 <b>regarding</b> 56:7 65:4 150:4 202:24 234:13 236:8 237:2 238:11 259:5 260:20 <b>regardless</b> 117:5 145:12 153:18 172:13 178:9 269:17 270:7 <b>regards</b> 26:22 <b>registered</b> 300:6 301:3 <b>registry</b> 54:7 270:11 <b>regular</b> 20:18 162:10 <b>regulatory</b> 103:21 103:23 212:7,8 213:8,9,22 231:24 <b>reinforced</b> 89:4 131:11 <b>reinforcement</b> 223:23 <b>reinforcing</b> 93:10 <b>reinventing</b> 150:1 <b>rejected</b> 233:15 <b>relate</b> 98:11 157:20 <b>related</b> 3:22 51:22 134:6 156:19 174:12 293:21 <b>relates</b> 1:5 <b>relating</b> 3:24 4:1,3 27:10,15 49:6 59:2 <b>relationship</b> 26:4 103:6 232:3 <b>relative</b> 146:24 301:11,13 <b>release</b> 255:6 <b>released</b> 101:3,10 211:3 <b>relevance</b> 107:18 163:5 <b>relevant</b> 36:10,13	62:5 65:11 108:14 108:19 110:8,24 111:2,10,16 115:9 115:10 140:8 142:9 147:10,14 169:14 177:24 178:15 203:6 286:22 <b>reliability</b> 272:24 <b>reliable</b> 270:14,15 273:8 280:16 284:18 292:2,13 <b>reliably</b> 283:4 <b>reliance</b> 4:9 36:3,4 36:6,18,23 37:2 37:10,20 40:16 44:3,11,23 45:1,6 47:16 48:22 49:5 49:13 50:6 54:17 54:18 58:13 62:4 62:6 65:6,7,10,16 65:19,23 70:17 71:16 235:20,21 290:7 <b>relied</b> 39:24 124:3 209:6 260:5,5 <b>rely</b> 45:15 47:6 97:12 113:16 114:4,11,15 126:6 126:10,12,17 209:9,9 274:20 <b>relying</b> 52:2 <b>remained</b> 15:8 292:6,7 <b>remains</b> 214:20 215:13,21 <b>remem</b> 34:2 <b>remember</b> 12:3 26:20 27:22 28:1 28:4,5,9,12,13 34:7 50:14,16 73:2 75:15 85:7 87:13,15 94:17,18 103:1,3 147:23 162:1 267:9 268:12 287:6	293:17 <b>remembered</b> 268:9 <b>remembering</b> 216:18 <b>remote</b> 75:13 <b>remotely</b> 198:20 273:20 <b>removal</b> 141:22 270:19 <b>remove</b> 82:12,16 92:13,17,21 93:6 93:8,10,20,23 <b>removed</b> 82:5 86:5 86:7,19 166:4 175:20 239:4 <b>removing</b> 83:4 84:8 93:7 137:9,13 <b>rendered</b> 64:17 <b>reoperation</b> 270:7 293:14 <b>repair</b> 1:3 89:4 91:13 93:5 132:2 160:10 161:9 216:24 217:14,14 224:22,22 225:5 226:3 228:19,20 229:3 238:10 244:23 245:8,15 245:16,21,23 246:7 249:7 250:4 252:1 264:15 265:4 294:16 296:24 298:6 <b>repaired</b> 294:13 <b>repairs</b> 88:24 89:1 89:1,5,8,13 91:18 134:9,10,18,20 223:23 228:2,2,3 228:15,16 246:14 246:19 252:13 264:18 295:14 296:15 <b>repeat</b> 6:14 48:18 120:12 152:4 182:6 258:19 261:11	<b>repeated</b> 271:13 <b>repeats</b> 31:16 <b>rephrase</b> 6:14 <b>replace</b> 173:7 262:22 <b>report</b> 4:10,12 11:14 35:7 47:15 48:23 49:6,14 50:7 51:11 52:12 54:6,17 55:7,8,16 61:1 62:2 63:1 69:24 70:1,4,7,9 70:16 71:8,11,16 94:5 135:16 171:19 173:22 196:7 198:7 201:17,24 202:12 202:13,14 270:5 270:17 273:4,22 278:13,16 284:23 284:23 288:4,11 291:20 293:12 294:23 296:21 297:24,24 301:6 <b>reported</b> 133:1,2,3 139:11,17 140:16 140:16 158:18 169:12 178:7 179:2 201:15,20 277:21 278:21,24 289:5,18,19 <b>reporter</b> 3:6 35:20 42:10,16 50:15 57:7 67:13 120:14 162:4 163:11 166:22 210:9 211:6 230:1 236:13 299:19 300:7,7 301:1,4,4 <b>reporting</b> 93:1 94:21 95:10 178:11 259:6 <b>reports</b> 29:4 37:20 38:17 40:10 61:17 63:6,9 170:3 200:10 274:2	281:16 285:8 288:10 299:1 <b>represent</b> 5:24 299:7 <b>representatives</b> 33:13 <b>represents</b> 5:21 <b>reproduce</b> 16:17 38:5 <b>reproduced</b> 38:4 180:7 209:11 <b>reproducible</b> 177:12 <b>requested</b> 120:13 146:18 162:3 163:10 301:8 <b>requesting</b> 18:20 <b>require</b> 64:15 104:19 141:3 <b>required</b> 23:19 58:17 141:4,5 226:1 237:21 240:11 242:24 263:13 <b>requirements</b> 104:21 237:23 <b>requires</b> 113:21 120:19 212:10,24 231:1 247:19 <b>requiring</b> 104:16 292:20 <b>research</b> 16:16 39:10 54:7,11 62:4 65:14 97:6,8 97:11 100:17 101:9,12 103:16 145:14 203:23 204:8,23 205:5 243:6,8,8 247:20 <b>researched</b> 171:9 <b>researchers</b> 205:17 206:4 <b>researches</b> 101:2 <b>reserve</b> 67:11,12,16 <b>reserving</b> 60:15 <b>residents</b> 33:19
--	--	--	---	---

<b>resolution</b> 10:10	<b>reused</b> 18:22	87:23,24 88:9,12	233:22 234:15	123:2 124:17
<b>resource</b> 3:14 41:7	<b>revealing</b> 10:7,9	88:21 89:15 90:2	238:22 239:6	125:12 126:1,21
43:18	<b>reverse</b> 275:17	90:11 92:5,5 95:6	240:4,8 244:6	127:9,13 129:7
<b>respect</b> 26:5 191:4	<b>review</b> 13:4 28:15	95:19 97:18 98:23	246:3,22 248:18	184:3,12 185:1,14
237:13	57:2 58:7,8,18,18	104:17 105:24	249:3 250:5	245:21 246:15,20
<b>respond</b> 272:1	62:8 64:16 66:13	106:4 111:21	254:16 256:16,19	251:5 262:16
<b>responded</b> 6:21	100:24 129:13	112:2,12,13	258:17 260:3	263:1 297:18,19
<b>responding</b> 6:8	135:15 168:19	113:12 114:13	261:8 263:2 264:5	298:6
<b>response</b> 51:13,18	183:3,3 266:6	115:2 116:3 118:8	269:14 270:9	<b>risky</b> 189:5 250:11
57:19 131:23	268:2 271:22	118:17 119:2,12	272:23	296:23
162:2 178:6	282:19 292:13	121:21 122:20	<b>rights</b> 209:14	<b>road</b> 235:7
181:17 201:23	294:24 295:5,19	123:6 125:19	<b>rigid</b> 144:22 145:10	<b>roberta</b> 1:12
221:11,12 237:24	296:2 299:11	127:10,19 130:7	228:9 229:21	<b>robotic</b> 89:3
238:3	301:7	132:11,14 133:15	230:10 242:20	<b>role</b> 13:9,12 14:8
<b>responsibility</b> 25:8	<b>reviewed</b> 13:4 32:1	133:16 134:20	<b>rigidity</b> 145:23	15:5,8,15,20 16:6
113:24 149:18	39:24 62:11 64:4	135:10,17,22	146:23 227:3,15	19:23 25:9 118:11
<b>responsible</b> 149:10	196:8 234:12	136:5 137:1,14	227:21,22 230:14	276:1
154:10 155:1	273:14 275:22	139:21 142:11,23	230:18,20	<b>room</b> 16:18 59:24
173:18 202:9	285:4,6	143:12 144:2,24	<b>rigorous</b> 236:8	91:10 93:19 99:2
<b>rest</b> 63:11 127:23	<b>reviewing</b> 61:12	145:11 147:20	237:2	101:22 102:4
258:8,9	<b>reviews</b> 271:7	150:14,19 151:20	<b>ring</b> 166:19 167:2	104:11 120:24
<b>restrictive</b> 296:13	272:15	151:20,24 152:3,7	189:15 257:9,13	244:5
<b>result</b> 177:7 203:24	<b>revise</b> 28:16 83:19	152:9,10,18	257:14 258:5,6,7	<b>rope</b> 136:4,16
204:9,15,19,24	<b>revision</b> 81:17 82:7	153:21 154:3	<b>risk</b> 21:2,3 83:3	138:11,21 140:7
205:3 264:18	84:4,6 88:2 91:23	155:9 157:19	108:7 109:24	277:18
<b>results</b> 4:7 29:2	92:8,24 271:4	158:19,24 159:7	110:13,14,20	<b>roped</b> 137:5 138:3
52:22 170:2	<b>revisionary</b> 84:2	162:13,24 165:13	120:19 121:3	<b>ropes</b> 139:8 142:1
205:18 206:6,10	<b>revoked</b> 9:1	167:11,14 168:5	124:22 126:6	<b>roping</b> 137:19
209:16 210:12	<b>reyes</b> 1:16	169:19,22 172:8	127:4,14,18	141:9 142:8
211:20 246:7	<b>rico</b> 33:19	174:20 177:15,20	128:10 129:14,16	<b>ross</b> 46:6
286:10	<b>right</b> 6:24 8:20	179:22 180:24	144:23 178:13,16	<b>rough</b> 63:3,3,8
<b>retain</b> 158:18	10:1,1,13 11:24	182:23 183:22	191:11 216:18	64:12 299:20
<b>retained</b> 11:3,4,6	12:14 18:13,24	188:21 189:6	238:8 245:18	<b>royalties</b> 256:19
11:16 12:10	21:10 22:11,15,18	191:23 193:7	246:1 249:13,13	260:14,19
<b>retention</b> 192:7	23:6,14 25:4 26:2	195:20 196:12,22	250:5,6,7,9,9,18	<b>rpr</b> 300:16 301:21
265:11,17	26:9 28:21 37:2	197:4,8 200:9	250:18,22 251:6,9	<b>rules</b> 6:2 11:15
<b>retractor</b> 99:21	39:6 40:17 45:6	201:5,11 202:9	262:19 264:7	<b>run</b> 242:2 249:20
<b>retrieval</b> 171:10	48:6 51:3 52:2	203:18 205:6,13	265:10 274:12	298:20
172:11	56:4 58:5 61:2,20	205:16 207:23	289:9 291:12	<b>running</b> 100:18
<b>retropubic</b> 20:21	63:24 64:5 65:4	208:3,19,20 209:4	292:14,19 296:8,9	242:1 267:1
72:8 76:11,19,21	65:16,17,21,22	209:8 211:13,14	296:12,13,15,23	<b>rush</b> 210:15
76:24 78:12 278:6	66:9 70:24 73:7	211:16,18 212:1	296:23 297:5,6,6	<b>rvts</b> 4:3
<b>return</b> 29:21 47:11	74:7 75:5 77:2,8,9	214:6,22 216:5,9	<b>risks</b> 109:8,16,18	
269:11	79:14,20,21 80:7	219:24 222:1	109:19 110:4,6,7	<b>S</b>
<b>returned</b> 45:22	81:15 82:21 84:17	223:11 224:17	110:8,16 111:14	<b>s</b> 1:5 5:1 249:13
<b>returns</b> 22:8	84:24 85:6 87:8	225:3 231:3,7	113:3,18 114:5,12	<b>sacral</b> 8:5 89:2

Jaime Sepulveda, M.D.

Page 336

<b>sacrocolpopexies</b> 89:3,3 90:11	<b>saw</b> 24:18,20 86:10 86:18 87:13 92:6	58:3,8,18 77:20 77:21 78:16	170:21 171:4,6 172:24 174:17	207:15 232:3
<b>sacrocolpopexy</b> 239:5	94:12 95:14 98:10 136:8,12,20,21,22	114:19,24 115:6 125:8 138:5 139:7	180:4 182:1 187:2 192:4,24,24	<b>selling</b> 240:4 243:21 249:2 260:19
<b>sacrospinous</b> 134:14 217:17	136:23 137:19,20 137:21,23 139:10	140:22 148:14 177:12 179:15	198:16 206:18 217:12,17 218:1	<b>sem</b> 283:23
<b>sacrospinously</b> 295:13	161:4,5,5 169:22 180:5 192:23	190:22 201:2 205:5 223:14	218:11 219:15,20 237:17 238:11,14	<b>send</b> 42:13 59:7 156:10,16,18,19 244:6
<b>sacrum</b> 9:11	196:11 209:23,23 238:19 242:15	256:7,11 279:21 279:22 299:14	244:21 258:17 260:22 271:5	<b>sends</b> 235:7
<b>safe</b> 131:16 132:12 133:16,19 222:6 260:7 282:2	252:10 258:17 268:3,4 277:8 296:12	<b>scientifically</b> 181:2 222:8 249:14	272:13,13 275:1 277:20 280:1	<b>sense</b> 24:11 160:23 179:14 191:1 245:24 252:16
<b>safer</b> 133:10,21 187:7,12,22 219:24 220:4,6,7 221:24 222:16,23 223:10 262:5,10 292:4	<b>saying</b> 25:3 26:15 106:4,7 112:23 114:10 142:1 147:9 150:11 163:19 194:6,9 204:4 206:3 213:24 218:5 221:4 229:16,17 240:20	<b>scientist</b> 203:22 204:4,5,7,13,22 205:15 254:9	283:21 284:12 285:19 286:6,11 290:19 292:1 295:8,21 298:3 299:14	<b>sent</b> 38:1 44:21 294:19
<b>safety</b> 130:11,14,16 130:18,24 131:1,1 131:14,15,22,24 132:1,4,14,17,19 161:10 187:19 196:13,14,16 210:7,12 236:9 237:2 238:8 243:3 252:2 262:15 263:1 274:12,14 274:16 275:9	<b>says</b> 131:24 141:20 151:3 190:5 193:2 276:11,11	<b>scientists</b> 187:18 194:15 223:18 254:22 255:1	<b>seeing</b> 16:14 29:4 50:14,16 66:14 112:17 276:22 297:15	<b>sentence</b> 215:13
<b>sake</b> 78:11 209:19 215:9	<b>scale</b> 272:12	<b>scissors</b> 87:3	<b>seen</b> 24:23,23 31:10 87:10 96:21,23 110:4 115:20 116:10 130:6,8 136:19 137:4,7 138:10,14 139:7 139:16 165:16 168:4 169:12,20 170:2,23,23,24 171:4 172:6 173:5 173:7,9,10 194:20 197:5 200:5,7 205:8 208:1,17,19 208:23,23,24,24 209:1 233:9,18,21 234:10 235:19 271:11 278:23 284:19 289:6 297:14,14	<b>separate</b> 9:16 36:22 122:22 244:15 297:13
<b>salary</b> 21:18	<b>scar</b> 191:24,24 192:1,3,4 217:6,9 217:11,21 218:8 218:17 219:3 224:6,7,18 225:10	<b>scope</b> 56:22 57:1 212:8	<b>second</b> 10:3 37:5 45:12 49:19 50:4 51:16 59:22 83:14 97:21 115:16 200:1 272:3	<b>separately</b> 52:11
<b>sales</b> 114:17	<b>scarring</b> 191:22 224:20	<b>scores</b> 251:6	<b>secondtolast</b> 215:12	<b>september</b> 56:10 56:10,11
<b>sample</b> 168:16 170:9 172:11 284:7	<b>scars</b> 192:4	<b>section</b> 19:3 96:19 96:22	<b>sections</b> 19:1	<b>sepulveda</b> 1:21 5:4 5:12 43:23 48:16 48:16,16,17,21 49:4,12 50:5 60:16 67:2,17,20 71:2 149:9 300:9 301:6 303:15
<b>samples</b> 168:13 169:24 170:1 186:23 283:1,2 284:2,2	<b>scholl</b> 1:11	<b>see</b> 9:12 16:20,20 16:23 24:21 25:16 25:17,18 36:13 38:7 48:11,12 54:23 59:18 67:9 95:1 97:14 99:1 102:3,7 115:8 117:2 121:23 134:1,12,13 138:1 141:17 143:8,15 143:15 152:12 153:20 154:1,2 159:10 161:2	<b>seen</b> 24:23,23 31:10 87:10 96:21,23 110:4 115:20 116:10 130:6,8 136:19 137:4,7 138:10,14 139:7 139:16 165:16 168:4 169:12,20 170:2,23,23,24 171:4 172:6 173:5 173:7,9,10 194:20 197:5 200:5,7 205:8 208:1,17,19 208:23,23,24,24 209:1 233:9,18,21 234:10 235:19 271:11 278:23 284:19 289:6 297:14,14	<b>sepulvedas</b> 43:17
<b>sanders</b> 1:8	<b>school</b> 19:5 79:23 80:12	<b>sections</b> 19:1	<b>segment</b> 85:8 87:14 172:22 192:17 193:11	<b>series</b> 271:16 272:7 272:14 273:8 275:12
<b>sarcoma</b> 287:20 288:1,7 289:9	<b>science</b> 118:7,11 191:1,1 204:20 205:2,22 207:19 220:23 221:6 279:24 280:1 285:19	<b>secur</b> 280:14	<b>segments</b> 87:9 92:21 193:12	<b>serious</b> 114:23 244:22 261:7
<b>sarcomas</b> 198:10	<b>scientific</b> 33:22	<b>see</b> 9:12 16:20,20 16:23 24:21 25:16 25:17,18 36:13 38:7 48:11,12 54:23 59:18 67:9 95:1 97:14 99:1 102:3,7 115:8 117:2 121:23 134:1,12,13 138:1 141:17 143:8,15 143:15 152:12 153:20 154:1,2 159:10 161:2	<b>sell</b> 206:17 207:13	<b>seroma</b> 81:6
<b>save</b> 60:10 99:1 131:22				<b>served</b> 34:16
				<b>set</b> 97:21 99:8 125:6,6 218:23 222:8,9
				<b>sets</b> 137:24
				<b>setting</b> 30:18,20 142:16
				<b>settings</b> 30:19 102:24 144:18
				<b>settle</b> 157:5

Jaime Sepulveda, M.D.

Page 337

<b>settled</b> 10:11,12	165:22 186:23	140:8 142:10,19	276:6	265:19,21 283:3
<b>settlements</b> 10:8	206:14 238:7	147:1,11,15 161:7	<b>slides</b> 35:5 45:4	288:6
<b>setup</b> 17:15	271:23 285:5,5	169:2,14 172:15	66:14 69:12	<b>small</b> 30:10 93:20
<b>seven</b> 62:9,9 63:7,8	286:11 288:14	172:20 177:24	105:21	134:23 157:3,10
63:9	289:2,8 295:1	178:1,6,14,15,20	<b>sling</b> 29:20 51:13	157:11
<b>severe</b> 107:7,22	298:1	178:20 180:11	72:24 73:6,18,20	<b>smith</b> 1:12
108:8 116:21,23	<b>showed</b> 139:12	181:2 200:9	74:1,9,23 75:19	<b>smoker</b> 75:19
117:14 118:14,23	180:1 238:8,8	262:15 263:1	75:21 76:3 77:23	<b>smoking</b> 174:4
119:19,24 120:8	252:12 292:2	279:17 280:18	77:23 78:1,2 80:7	<b>sneeze</b> 137:11
120:16,16,20,23	<b>showing</b> 25:9 55:14	289:8 295:1	80:16 81:24 82:12	<b>snell</b> 2:14,14 3:4
120:23 121:1,4	148:15 182:14	<b>significantly</b> 108:7	82:15 83:20 84:11	5:17 11:9 14:22
127:18 128:10	209:15 215:9	127:18 128:10	84:12 85:8,12,16	20:3 21:16 22:12
<b>severity</b> 126:20	<b>shown</b> 133:10,12	133:13 193:3	85:17,20,21 86:3	26:3 27:7,21 28:7
<b>sex</b> 225:12	133:16,19,20,20	280:10	86:5,14 87:22	29:1,23 35:14,18
<b>sexual</b> 227:5,17	142:21 151:19	<b>sikes</b> 1:17	95:12,12,14,18,19	37:18 38:1,9,14
295:3,21 298:12	152:14 163:1	<b>silly</b> 115:16	97:12 107:4 108:6	38:17,24 40:9,12
<b>shape</b> 135:21,22	169:23,24 170:3	<b>similar</b> 165:1 179:3	108:18 109:8,18	40:14,18 41:4,11
297:2	180:24 185:8	193:16 198:20	111:15 113:4	42:3,12,15,22
<b>share</b> 80:8 210:17	<b>shows</b> 131:13,21	246:15 271:5	135:21,22 136:9	43:4,9 44:9,14,20
210:19	157:4 163:13	<b>similarity</b> 287:14	136:10,11 137:13	44:24 45:3 47:20
<b>sheath</b> 138:13	173:12 186:22	<b>simmons</b> 46:7	146:13,16 148:22	47:22 48:5 49:20
141:22	207:4 229:18	<b>simple</b> 234:1	149:6 150:1	49:23 50:18,21,24
<b>sheet</b> 196:13,14,17	246:18 282:16	<b>simplify</b> 175:11	153:17,18 154:5,7	52:12 53:10,14
287:3 303:11	283:9	<b>simplistic</b> 192:1	161:8 164:23	54:21 57:8 58:1
<b>shelf</b> 77:16 79:13	<b>shrinkage</b> 191:12	<b>single</b> 24:23 113:9	170:7 172:22	59:4,18 60:10
<b>shelves</b> 244:3,13	192:20 227:22	127:4,4 130:9	173:1,14 179:24	63:22 65:24 66:11
<b>sheperd</b> 1:19	294:1,8,10	140:2 186:21	182:14 191:6	66:16,20,22 67:14
<b>sheri</b> 1:11	<b>shy</b> 74:24 252:21	204:24 276:16,16	192:7 201:22	68:4,12,19,23
<b>shes</b> 85:12,13	<b>side</b> 27:22 83:12	297:7	202:18 265:15	69:2,7,14,16,19
<b>shift</b> 106:24 121:12	87:14 91:12 107:6	<b>sir</b> 37:3 268:15	278:5 281:20	70:13,22 77:19
135:18 214:18	107:21,24 119:20	<b>sit</b> 194:5,6 213:6	288:21	78:9,23 82:13
230:22	119:21,24 120:2,5	234:11,21,24	<b>slings</b> 20:20 36:13	88:4 89:21 92:14
<b>shifting</b> 155:11	120:20 121:5,6,8	<b>site</b> 198:10 203:1	72:14,15,16 73:4	101:4 104:18
203:21 210:5	121:8 123:17	209:3	75:8,10,11,16	107:8,23 108:9,22
<b>shock</b> 226:4,5,8	191:4 224:11,12	<b>sitting</b> 72:13	76:17 77:13 80:11	109:10,21 110:19
<b>short</b> 73:9 101:13	264:13 267:2	237:14	81:15,19 82:8	111:18 112:14
<b>shorter</b> 78:1 294:11	<b>sides</b> 26:24 140:20	<b>situation</b> 26:12	84:15,18,22 85:4	113:20 114:7,14
294:12,16 297:16	140:21	121:11 248:13	85:6 86:23 95:9	115:3,23 116:4
<b>shortly</b> 69:6	<b>signed</b> 240:22	<b>situations</b> 133:20	97:9,16,20 141:20	117:17 118:9,19
<b>shot</b> 91:9	242:15,15	<b>six</b> 276:19,23	144:22 150:4,10	120:10 121:17
<b>shouldnt</b> 114:11	<b>significance</b> 57:15	<b>size</b> 184:19 188:15	164:7 169:24	126:9,14,22
117:1 197:22	78:1 130:20	198:17 274:1	170:1,6,8,21	127:11,20 128:12
205:11,13	183:17 184:3,12	281:5,10 290:10	172:2 174:24	129:1,9,20 132:15
<b>show</b> 17:3 25:21	185:14	290:17	188:11,12,13	134:21 135:11
29:10 55:2 131:9	<b>significant</b> 111:1,3	<b>skills</b> 125:21	208:3,18 209:4	136:6 138:23
133:7 136:18	111:9,17 129:16	<b>slide</b> 68:11 137:24	211:10 236:16	140:11 141:12



142:12 144:4	261:9,17 262:7,17	281:19	<b>speculative</b> 115:24	277:9
145:1 146:2 147:3	263:3,9,17 264:2	<b>specialized</b> 123:19	116:7	<b>starting</b> 33:1
147:13 148:6	264:6,12 266:8,22	297:6	<b>spell</b> 131:18 166:22	285:19
149:21 150:24	267:1 269:2	<b>specialty</b> 13:3	<b>spend</b> 24:6 63:2,20	<b>starts</b> 215:13
151:11,18 152:21	282:19 286:1	105:15,18 140:2	267:14	<b>state</b> 5:10 12:16
152:24 153:3,11	290:5 297:17,23	191:16	<b>spent</b> 60:13,23	158:17,22 214:20
154:13 155:4,15	298:11,17 299:16	<b>specific</b> 13:20	61:16 62:24,24	288:13 300:4,8,17
155:19 156:13,16	299:18	25:14,24 28:10	63:21	301:22
159:8,16 160:7	<b>snow</b> 2:11 8:14	37:22 45:14 56:19	<b>spin</b> 259:5,8,8	<b>stated</b> 90:20 92:18
161:14 162:14	<b>socialized</b> 273:1	58:20 59:1 88:18	<b>spinning</b> 259:9,9	<b>statement</b> 47:23
163:8,24 166:16	<b>societies</b> 251:12	94:2,17 101:7	259:16	70:4,10 71:11
166:21 167:15	<b>soft</b> 158:6 162:11	121:10,11 123:22	<b>spinous</b> 89:2	145:5,6 151:6,9
169:17 170:15	214:20 215:15,21	124:7 125:6,23,24	<b>spoke</b> 56:10,16	158:20 159:1
172:21 176:8	216:8,10,23	201:7,8,24 203:24	74:11 102:13	182:4 187:11,13
177:4,10 178:4,18	225:14,17,22	204:9,15,19,24	<b>spoken</b> 98:18	190:10 193:22
179:19 182:5,16	<b>sold</b> 234:17 256:19	205:3 206:6 209:5	130:19	194:3,9 195:14
184:15 185:3	<b>solely</b> 126:6	217:10 219:9	<b>sponsor</b> 243:7	215:1 216:2 238:4
187:9 188:1	<b>solve</b> 29:11 217:23	232:22 233:20	<b>sponsored</b> 121:13	240:15 242:8
189:16 190:3,19	217:24 218:3,7,12	238:20 272:6	<b>sporadic</b> 33:20	245:4,5 246:22
191:13 192:22	218:14,15	276:2 278:6 287:6	<b>spreadsheet</b> 267:5	253:3,13,20 287:4
193:8 194:19	<b>somebody</b> 49:23	<b>specifically</b> 8:5	267:19 268:2	290:14 295:9
195:4 196:23	<b>someones</b> 25:3	21:3 91:19 94:16	<b>springer</b> 45:12	<b>statements</b> 221:17
197:20 199:10	<b>sorry</b> 32:13 50:15	95:7 98:19 106:11	<b>square</b> 183:24,24	244:20 262:13
200:16 204:16	57:7 82:1 103:19	130:19 169:20	184:1,7,8	<b>states</b> 1:1 101:18
205:1,7,19 206:7	103:20 135:7	173:9,21 263:6	<b>stack</b> 39:12,13,19	102:2 196:17
208:4,21 209:17	153:2 163:9 166:2	273:22 281:8	40:4,15	198:7 230:24
210:8,10,22 212:7	182:7 210:9 215:9	282:4,20 295:9	<b>stacks</b> 39:16	231:6,12,21 234:2
214:7,23 215:15	284:6 296:16	<b>specifics</b> 24:1 28:9	<b>standard</b> 74:16,19	<b>stating</b> 105:23
216:14 217:2	<b>sort</b> 37:23 114:17	35:8 62:8 123:18	74:22 75:1,2,4,5	<b>statistical</b> 179:4
218:10,19 220:1	167:24 172:19	234:18	79:2 80:1 81:9,12	<b>statistically</b> 111:2,9
222:3,18 224:10	202:2	<b>specified</b> 23:16,18	89:14,20,22 90:5	111:16 133:13
226:15 227:18	<b>sounds</b> 12:24 55:24	<b>specimen</b> 17:7,16	90:13,15 100:7	142:10,19 146:24
228:12 230:12	218:5	106:23 276:7	129:21 188:6,20	147:11,15 178:1
231:8,15,23	<b>source</b> 95:15 114:4	<b>specimens</b> 14:3	281:19	178:15,20 289:8
232:16,21 233:5	<b>south</b> 1:23 71:23,24	17:11,16,24 18:21	<b>standards</b> 100:12	295:1
233:12,16 234:7	<b>southern</b> 1:1	<b>spectroscopy</b> 284:8	103:9,21,24 123:8	<b>stay</b> 24:1 83:2
236:11,14 239:8	<b>space</b> 92:16,16	284:8	123:12,14,23	164:24
239:11,18 240:5	99:10	<b>spectrum</b> 140:21	124:3	<b>stays</b> 228:3
240:12 241:13	<b>spacer</b> 141:19	<b>speculating</b> 190:12	<b>stands</b> 169:19,22	<b>stenographic</b> 301:9
243:4 246:17	<b>sparks</b> 2:8 59:24	<b>speculation</b> 107:8	<b>staplers</b> 99:20,20	<b>stenographically</b>
247:5 248:2	236:3 299:21	113:21 114:7	<b>start</b> 93:20,20	301:5
249:10 250:15	<b>speak</b> 198:19	199:10 210:8,10	143:3 212:16	<b>stenosis</b> 134:2
252:4 254:7,17	<b>speaking</b> 7:24	222:18 227:18	223:15 249:17	292:20 293:14,22
255:3 256:1,20	67:20 84:7 216:19	240:12 241:13,16	<b>started</b> 13:24 14:10	<b>step</b> 102:9 165:8
257:15,20 258:18	253:15	247:6 248:2 254:8	14:21 15:3 76:24	222:21 223:7
259:22 260:9,21	<b>speaks</b> 132:17	260:21	91:16,16 137:21	<b>steps</b> 122:22 123:18

124:2 276:10 <b>stick</b> 77:11 <b>sticker</b> 48:19 <b>stiff</b> 144:22 216:12 216:17,24 228:9 <b>stiffer</b> 145:10 280:5 280:5 <b>stiffness</b> 145:23 146:23 227:4,16 230:6 <b>stimulator</b> 104:7 <b>stimulators</b> 104:7 <b>stock</b> 88:16 <b>stop</b> 26:11 27:2 28:15 223:7 247:3 247:23 248:7,10 248:16 255:21 <b>stopped</b> 240:3 243:21 249:2,2 <b>storage</b> 172:1 <b>straight</b> 133:24 <b>straightforward</b> 165:4 <b>strands</b> 158:1 <b>street</b> 2:3,7 <b>strength</b> 158:19 160:1 173:23 176:19 <b>stress</b> 4:6 52:21 72:2,6,22 73:16 74:17 143:9 171:9 186:4,16,16 193:19 194:14 225:7,24 281:6 282:3,4 287:10 <b>stressed</b> 143:16 <b>stresses</b> 164:17 <b>stressor</b> 172:10 <b>stressors</b> 279:16 <b>stretch</b> 30:14 137:7 138:8,8 148:4 186:2 <b>strike</b> 31:23 89:17 128:6 138:16 159:3 161:10 199:23 204:6	228:6 247:1 263:14 <b>strong</b> 171:17 196:18 261:20 <b>strongest</b> 150:21 151:6 275:17 <b>structure</b> 100:17 136:4,16 137:5 138:11,21 140:7 141:9 142:9 <b>stubblefield</b> 1:11 <b>students</b> 18:5 <b>studied</b> 98:18 124:16 147:22 181:5 194:12 253:11 279:3 282:1 <b>studies</b> 108:14 116:16,17 119:7 119:10 130:22 131:13 132:3,9,13 133:7 147:24 155:6 167:22,23 168:4 169:13,20 170:4 172:6 181:8 186:23 201:7 203:8,16,19 208:2 208:17,20,23 209:3,6,10 211:2 211:5,9,9,11,21 212:15 213:1,15 213:18,20,21 214:3,5,9,11 228:1 236:8 237:2 238:6,7 240:11 241:18,20 242:24 252:11 269:16 270:6,13 271:6,7 273:6 275:6,16 277:21,24 278:1 282:9,11,20 285:5 286:20 288:5 289:1,6 292:1 298:1 <b>study</b> 29:13 31:22 31:24 32:1,2	81:13 119:18 124:20 125:10,10 125:10,14,16,18 125:20,24 126:4 130:24 131:3,9,16 131:20,24 132:5 133:5,23 142:24 143:11 144:1,6 145:2 151:3 152:14,14 161:6 165:11,15,20 166:1,3,6,12,13 166:14 167:10 168:15 186:21 195:16 197:9 200:18 201:2,5,9 201:13,16 202:1,1 202:12 203:23 204:2,8,10,11,14 204:18 206:5 207:8 209:15 211:5 212:4,5 238:15 243:11,12 243:13,16 254:20 255:11,12 257:3,5 257:7,8,16,22 258:1,15,23 269:10 270:18,23 271:15 272:16,16 278:6,7,19 279:2 279:3,6,11,18 280:1,9,17,21,23 281:2 283:21 284:14,15 289:12 292:22,24 294:12 <b>stuff</b> 37:18,19 38:2 38:10,12 39:9,11 40:3,10 44:24 69:8 156:18 241:9 257:18 <b>subcutaneous</b> 198:9 202:24 <b>subject</b> 8:3 9:7 32:4 39:17 158:23 159:5,14 215:23 235:16	<b>subjective</b> 93:14 152:11 <b>submit</b> 62:6 65:15 65:18 100:19 182:19 <b>submitted</b> 59:14 100:23 193:18 211:22 212:1,2,5 <b>subpoena</b> 34:16 <b>subpoenaed</b> 5:18 <b>subscribed</b> 303:18 <b>substance</b> 57:15 121:13,16 122:2 181:6 199:7 303:10 <b>success</b> 257:6,24 <b>successfully</b> 225:16 <b>suddenly</b> 141:4,10 <b>sued</b> 9:4 <b>suffering</b> 88:2 <b>sufficient</b> 123:1,6 <b>sufficiently</b> 128:8 <b>suggest</b> 227:21 <b>suggested</b> 279:8 <b>suite</b> 2:3,12 <b>summaries</b> 62:10 <b>summarized</b> 298:22 <b>superior</b> 253:4 <b>supersedes</b> 256:7 <b>support</b> 5:15 79:8 93:13 191:21 194:8,10 208:2,18 209:3,7 223:9 253:3 260:7 <b>supported</b> 73:11 245:10 <b>supporting</b> 139:20 148:14 <b>supports</b> 46:12 <b>supposed</b> 38:5 180:17 <b>sure</b> 24:13 27:1 36:23 40:19 44:15 44:20,22 51:24 66:9 141:1 187:12	188:18 210:20 214:24 215:18 218:2 239:21 258:20 261:12 266:18 268:5 269:5 273:15 288:22 289:21 <b>surface</b> 167:10,11 167:23 169:11 170:8,10 171:22 200:3 283:23 <b>surgeon</b> 24:11,20 83:9 106:1 126:5 126:12,16 154:22 229:6 244:5 269:11 277:1 <b>surgeons</b> 3:14 16:23 40:20 41:7 43:17 83:10 102:23 107:17 139:24 150:8 190:24 191:4 209:19 223:18 228:14,24 237:10 237:11,16 240:20 240:23 242:6,22 247:8 276:2,15 277:3,6 290:19 291:14 292:9,10 294:21 <b>surgeries</b> 34:23 72:1,5 81:18 82:7 84:5,5,9 85:15 88:21,23 91:24 92:8 94:9 120:20 <b>surgery</b> 25:1 68:2 71:24 72:22 73:15 77:12,14 81:7 87:3,23 88:1,2 92:24 95:2 99:23 100:21 107:9,19 109:13 111:10 112:2 114:19 120:7,15 127:5 152:1,12,16 153:15 154:16
---	--	--	---	--

176:3,3 218:22,23 245:9,22 246:9 250:11,21 270:8 292:20 297:5,5,6 <b>surgical</b> 14:13 16:22 24:11 68:1 98:24 104:9 105:19,23 106:2 125:21 139:24 146:16 150:14 158:3 188:20 189:22 244:23 249:6 250:4 <b>surgically</b> 74:17 <b>surprise</b> 29:7,8 145:15 247:12,13 247:14 <b>surrounding</b> 181:23 182:9 201:21 <b>susan</b> 1:18 <b>suspend</b> 26:18 <b>suspended</b> 9:1 <b>suspension</b> 89:1,2 134:13 <b>suspensions</b> 175:17 295:14 <b>sustained</b> 283:9 <b>suture</b> 101:12,12 134:9,13 141:17 158:3,9,18 160:1 162:13,24 163:2,3 163:5,7 165:12 167:6,11 174:8 175:19,19 185:20 <b>sutures</b> 93:11 99:14 101:13,15,22 103:15 104:9,12 104:13 106:11 109:13 134:9,11 134:12 136:20 159:11,20 163:13 163:20,21 165:21 166:9 173:8,8,9 173:10,13,23 175:17 185:19	188:17 198:21 199:17 201:13 208:9 217:15 264:22 <b>swint</b> 1:17 <b>switch</b> 77:2,5 236:5 251:20 <b>switched</b> 77:8 79:11 <b>sworn</b> 5:5 300:11 303:18 <b>symptomatic</b> 94:12 <b>symptoms</b> 145:17 <b>synonymous</b> 89:11 <b>synthetic</b> 72:24 73:4,6,18,19,24 74:8,23 76:6 80:6 81:18 82:8 84:15 84:21 85:3 86:5 86:23 89:19 90:22 91:16,24 92:8 95:11 104:23 246:15 251:24 <b>system</b> 1:3 178:12 199:6 273:1 <b>systematic</b> 18:3,8 295:19 296:2 <b>systems</b> 33:23 178:11 <hr/> <b>T</b> <hr/> <b>t</b> 302:1 <b>table</b> 26:6 <b>take</b> 6:19,21 17:2 18:18 23:5,19 42:12 43:10 45:2 55:21,22 64:21 65:2 66:8,22 67:5 68:12 74:18 87:2 87:17,18 91:9 96:9 101:6 115:15 133:22 141:10 155:13 157:17 191:2 222:21 224:4 226:8,21 234:1 239:21	244:3 248:21 266:6 270:16 299:22 <b>taken</b> 56:1 85:8 96:11 155:20 177:17 194:13 215:5 266:12 <b>taker</b> 64:24 <b>talented</b> 275:6 <b>talk</b> 13:9 31:15 62:18 71:21 135:18 146:6 263:21 274:24 294:23 298:5 <b>talked</b> 10:17 56:15 273:13 274:10 275:21 276:3 285:2 291:8 296:24 <b>talking</b> 21:3,13,14 24:24 28:10,11 59:18 90:14 93:2 109:23 137:15 139:14 162:7 165:9,24 167:21 169:5,10 222:6 224:11 249:12 266:18 281:15 282:13 292:8,9 294:1,20 <b>tanny</b> 290:8 <b>tape</b> 83:9,17 <b>task</b> 14:24 58:22 <b>tasks</b> 59:1 61:8,23 <b>taught</b> 18:5 25:12 79:23 80:12,13 150:3 <b>tauts</b> 208:2 <b>tax</b> 22:8 <b>taxing</b> 35:20 <b>teach</b> 19:15 33:14 33:15 276:1 277:10 <b>teacher</b> 24:9 25:4,7 276:9 <b>teaching</b> 14:10 15:6	16:9 18:22 19:4 26:1 28:17 81:14 <b>teasley</b> 1:18 <b>tech</b> 46:22,23 <b>technique</b> 141:16 142:3,8 150:1 172:10 175:3,4,24 <b>tedious</b> 34:13 <b>tell</b> 10:9 17:8,9 31:5 36:14 38:19 65:10 67:20 69:2 74:13 75:13 79:6 85:11 86:15 112:17,18 112:19 113:23 122:22 137:16 139:9 149:11 151:14 152:11 166:17 169:1,3 195:6,12 218:21 219:19 228:24 229:1,2 241:24 242:2,6 243:5 250:3,8 255:6 274:8 <b>telling</b> 138:5 169:7 195:11 232:5,12 235:5,8 <b>tells</b> 213:22 251:14 251:15 <b>temperature</b> 198:24 <b>ten</b> 16:3 21:13 63:3 63:10,20,21 72:4 72:5 75:7,10 76:13 84:16,24 85:1 88:20 242:18 283:11 <b>tend</b> 271:24 <b>tendency</b> 136:3,15 138:18,20 140:5 161:12 177:1,23 185:22 <b>tenotomy</b> 87:2 <b>tensile</b> 173:22 176:19 <b>tension</b> 146:14,16	148:18 149:11,16 150:19,22 151:3,7 151:24 152:6,8,10 153:8,9 186:17 208:10 265:15 <b>tensioned</b> 153:21 <b>tensionfree</b> 148:20 148:21 <b>tensioning</b> 149:19 150:6 153:17,23 <b>teresa</b> 1:13 <b>term</b> 24:12,14,15 24:16 25:5 73:9,9 74:19,22 75:3,5,5 79:1 101:13,13 110:3,13,24 176:16 192:11,13 192:15 208:11 236:19 259:8 267:10 <b>terminology</b> 250:8 250:19 <b>terms</b> 16:15 25:18 74:12 79:3 81:5 99:1 109:16 117:22 123:9 129:16 131:21 138:5,6 161:4 176:19 184:1,3,12 184:24 186:5,24 187:2 200:22 224:7 252:2 276:11 296:10 <b>tertiary</b> 271:17 <b>test</b> 136:9 143:5 180:12 181:21 182:18 200:2,7,12 203:11 223:2 277:14,15 293:18 294:8 <b>tested</b> 108:11 145:9 167:12 198:8 203:17 226:13 282:5,7 <b>testified</b> 5:6 12:13 12:15 21:8,11
---	---	--	---	--

170:16 262:18 273:14 274:7 292:18 <b>testify</b> 269:7 274:9 298:16 <b>testimony</b> 5:19 11:17 39:24 85:4 86:20 129:2 138:9 177:5 212:18 250:12,16 263:4 268:19 274:4 298:23 <b>testing</b> 103:12,12 103:14 104:16,20 106:15 136:22 140:22 142:23 143:17,17 160:1 180:23 182:19 186:2 226:19 230:15,15,16 283:24 285:3 <b>tests</b> 106:12 183:11 283:24 <b>texas</b> 2:4,7 <b>textbook</b> 262:22 <b>thaman</b> 1:18 <b>thank</b> 47:10 266:11 299:18 <b>thanks</b> 157:18 <b>thats</b> 7:2 8:19 12:12,23 16:3 19:16 22:2 24:13 25:2 27:23 28:20 28:20 30:3,8,8,22 34:12 35:10 36:19 40:4 41:4,6,11 44:4,15 47:17 48:18 49:12 51:1 51:23 53:11,21 56:21 61:22 63:21 65:17,22 69:1,9 69:15 70:3,15 71:7 72:10,10 73:11 74:13 76:10 80:18,18 81:11,24 82:19 83:4,12	86:20 87:14 91:8 91:14,14 92:10,10 92:11,18 99:3 105:20 106:5 107:12 109:4,5 110:1,12 115:1 116:5 117:8,9 119:7,8 121:1,8 122:6 123:12 128:2,3,3 129:4 131:10 132:20 133:15 134:7,24 135:12 136:23 137:9,10 138:7 139:1 142:1,2 144:13 149:3,6,8 149:9 150:7 152:1 152:1 153:1,13 154:21 155:6,6 159:1,5 160:6 162:20 163:6,13 164:10,10,10 165:22,23 166:24 167:24 168:2,23 169:2,5,12 170:12 172:3,6 174:14,14 174:16,17,18 176:9,14 177:15 178:14,16 181:11 187:11 190:12,18 190:22,23,23 192:6,8 193:14,20 198:11,18 199:21 199:21,21 200:4 202:5,7,22,23 204:3,19 205:12 206:1 214:13 215:3,10 217:4 218:4 219:13,13 220:3 221:13 222:2,5,19,19,24 223:5 224:14 227:10,12 233:24 233:24 235:7,9,15 238:19,19 239:7 239:14 240:9	241:5,14 243:22 244:9,15,19 245:10 249:20,22 249:23 251:14 252:10,18,19 254:11 256:5 258:6 266:23,23 269:24 270:1 271:13,13 276:12 279:2,5,13,23,23 281:12,12,12 283:2,6 284:14,15 285:20,23,23 289:15,15,16,17 289:17,19 290:10 290:22 292:23 293:16 294:18 295:5,5 299:16 <b>theoretically</b> 160:9 <b>theorized</b> 279:19 <b>theory</b> 78:6 185:6,6 185:13,13 187:6 199:21 200:23 221:23 222:13 223:8,9 283:16,20 289:24 <b>therapy</b> 272:1 <b>theres</b> 6:20 17:22 35:15 42:15 48:17 51:12 69:17 78:24 80:9,9 83:21,21 110:4 115:4,11,11 115:17 120:2,2 123:22 124:3 125:16 130:6,16 131:17,24 132:3 132:16 135:12 138:4 145:7 146:3 147:5,5 148:14,15 149:12,12,12,14 151:1,2 152:17 156:1 159:22 160:24,24 161:1 165:5,20 167:7 171:8,15,15 172:2 173:1,11 175:2,23	176:9,9 177:6,6 178:19 181:13 183:19,19 191:18 193:17 194:8,10 200:17 201:2 202:4 205:2,8,9 209:18 210:18 213:7 217:8,8,8 220:19,24 223:9 225:4 227:20 229:12 240:16 242:10 247:7,19 250:6,22,24,24 251:11 252:9 254:11,18 261:19 264:22,22 267:4 269:19 270:12 274:21 279:10,10 279:12 280:13 282:6 294:11,16 295:10,10,11 297:11 <b>thermal</b> 284:9,10 <b>theyll</b> 83:11 <b>theyre</b> 17:12,12 18:21 36:8,16,16 36:19,19 51:22 78:15 79:2,2 83:10 84:18 87:4 87:5 110:10 115:9 119:24 120:2 122:17 124:9 130:12 134:14 143:2,2 160:14 164:16,24 165:1 199:17 206:9 213:10 230:6 235:21 241:24 244:15 268:8,8 299:12 <b>thin</b> 167:5 <b>thing</b> 6:20 25:1 31:19 47:18,20 53:10 54:9 84:8 93:14 102:21 108:12 111:1	116:9 117:7 132:14 138:4 140:4 179:16 181:14 193:3 221:5,5 242:23 243:2,3 266:17 267:15 287:18 291:18 293:23,24 <b>things</b> 17:17 19:15 20:1 57:2,4 76:6 96:18 104:13 119:14 132:5 140:20,20 199:18 208:10 214:12 220:22 221:14,17 221:18 225:13 232:6 251:18 257:21 263:21 264:7 265:24 269:5,20 274:1 296:24 297:3 <b>think</b> 18:14 21:24 24:10 25:5 29:14 29:18 31:8 34:5 35:14 37:20 38:5 38:9 39:4 41:4 42:3 60:12 62:15 67:14 75:1 78:10 79:5 80:3,13,14 81:4,10,20 89:6 94:1 106:1 107:9 107:21 108:16 109:19 112:18 113:7,22 114:15 117:2 122:5,11 135:12 142:20 148:23 149:22 151:19 154:17,21 165:8 166:23 167:21 170:16,17 170:18 175:24 177:15 187:11,24 188:3 193:19 194:1,6,6 195:5 195:21 201:1,17 204:10 212:9
---	---	--	---	---

213:2,3 215:12	231:13 233:8	<b>times</b> 10:8 29:17	274:4,11 276:3	299:11
216:17 219:14	262:18 280:4	93:12 107:16	289:8 291:8 297:1	<b>translate</b> 111:8
220:3,4,9,9	<b>threw</b> 86:16	112:7 130:4	298:22 299:6	139:14,17 143:17
226:16,24,24	<b>thumb</b> 3:22,23 4:1	202:15 233:15	<b>todd</b> 187:17	146:10 167:7
228:13 229:3,24	4:2,14 18:18	262:18 263:19	<b>told</b> 115:22 179:15	172:14 195:13
230:13 232:3	35:15 38:2 48:9,9	275:23 280:5	229:1 235:14	218:18 237:15
233:1 234:4	48:10,14,14,21,22	<b>timing</b> 234:22	252:15 255:1	<b>translated</b> 164:15
235:21 240:18	49:11 50:4 66:1,7	235:12	275:20 292:12	<b>translates</b> 160:9
241:23 242:9,13	66:10,23 67:2,6	<b>tiny</b> 156:12	293:21	<b>translation</b> 145:17
242:18 243:11	67:17,21 68:8,9	<b>tissue</b> 80:11,16	<b>tolerability</b> 184:21	<b>transobturator</b>
247:7,8,8,13,18	68:14,20 71:1	81:15 94:13,14	291:4	20:20 72:8 211:10
247:18 248:9,19	81:23	134:10 173:14	<b>tomorrow</b> 35:8	278:5
250:19 251:17,17	<b>tied</b> 167:6	174:3,10 181:14	58:23 59:1,7	<b>transpiring</b> 27:17
252:2 253:18,21	<b>tight</b> 85:16,17	181:15,22 182:1,9	299:7	<b>transportation</b>
253:23 254:4,18	137:13 141:19	192:2,19,21	<b>tomus</b> 278:4	23:14
254:24 255:2,5,13	<b>tighter</b> 150:9	215:24 218:8	<b>top</b> 252:15 255:17	<b>transvaginal</b> 47:24
255:22 256:5,6	<b>tightly</b> 137:18	219:9 225:7 228:2	272:15 288:13	89:17 92:1,9 93:2
258:14,21 262:18	<b>time</b> 6:19 13:22	228:16,19 232:11	293:11	94:22,23 95:6,7
263:17 264:4	15:8,10,22 16:23	246:14,19 247:1	<b>topic</b> 56:17 286:16	97:8,9,11,16,17
271:17 274:7,13	16:24 17:5 24:7	252:1,13 264:15	<b>topics</b> 269:3 273:23	97:20 100:2
277:18 283:4	27:10 28:13 29:18	264:18,23 265:4,5	<b>toronto</b> 23:1	104:23 107:3
285:10 288:4	31:2,7 38:2 61:13	284:5 292:15,21	<b>total</b> 21:22 22:3	108:6,18 109:8,18
292:18 293:20	61:15 62:13,16,17	293:15 294:3,4,5	227:23,24	111:15 113:4,17
296:9	62:24 65:12 68:16	294:16 296:15,24	<b>totally</b> 120:1 222:7	113:19 114:3,6,12
<b>thinking</b> 95:17	74:10,16,19 75:12	297:14,20 298:3,8	222:9 287:18	114:22 115:17
179:17 208:13	75:21 76:7,16,23	298:14	<b>touts</b> 208:18	126:2 236:9,12,19
<b>thinner</b> 185:20	81:5 83:18,19	<b>tissues</b> 3:16 45:12	<b>town</b> 23:13	236:20 237:3,3,9
<b>thinnest</b> 188:16	85:11 87:13 88:14	158:24 181:5	<b>toxic</b> 180:16	239:4 243:1
<b>third</b> 51:19 86:11	91:17 92:6 103:11	216:13 217:1	<b>toxicity</b> 103:13	244:23 245:8,15
86:11 175:2,9	103:14 106:9,10	225:18 228:10	179:20 180:1,16	245:20 246:8
<b>thirdparty</b> 285:7,7	125:22 130:6	<b>title</b> 14:17	180:16	<b>transvaginally</b>
<b>thomas</b> 1:13	133:7 135:13	<b>titled</b> 67:3 68:13	<b>track</b> 85:9 273:2	89:20 90:6,16,23
<b>thoroughly</b> 298:19	136:19 137:2,7	131:15	<b>tracking</b> 273:1,2	247:24 248:8,17
<b>thought</b> 29:9 47:23	140:3 149:1	<b>today</b> 34:14 37:12	<b>tracks</b> 269:21	250:13
93:8 219:24	155:15 188:13	39:18,21,23 41:15	<b>traditional</b> 245:9	<b>traveling</b> 23:16
220:16 221:15,15	192:9,23 193:13	56:8 59:7 62:17	245:16,22	24:2
259:4 274:15	199:4 206:22,24	63:17 64:8 65:21	<b>trained</b> 146:19	<b>treat</b> 86:23 91:20
<b>thousands</b> 232:18	207:14 208:6,8	67:18 68:16 70:8	249:19 277:7	107:4
<b>three</b> 8:12 81:20	209:19 220:17	70:9,18,19 71:14	<b>training</b> 123:19	<b>treated</b> 284:3
82:7,10,11 83:6	223:13 228:20	71:17,19 72:13	250:1 262:22	<b>treater</b> 7:17,19 8:1
83:18 84:2,4,5,9	232:9 235:18	90:15,15,18	<b>trans</b> 46:22,22	<b>treatment</b> 4:6
84:10 85:15 86:9	236:23 237:13,24	193:18 194:5,7	<b>transabdominally</b>	30:21 52:21 90:6
104:15 134:1,24	244:12 256:19	202:15 212:19	295:13	90:17,23 131:11
164:2,2 165:2,2	262:2 269:17	232:10 234:12,21	<b>transcript</b> 301:8	189:4 225:16
174:2,21,22	273:21 296:17	234:24 235:2,5,8	<b>transcription</b> 303:7	269:17 272:1
200:10 228:1	297:7	268:14 269:15	<b>transcripts</b> 299:8	281:6 287:10



<b>trial</b> 4:5 10:13,14 52:20 64:13,14 119:15,17 130:10 130:13,15 132:21 134:8,11 135:4 140:18 157:8 240:18 253:11 268:3,4 275:13 293:13 296:18,22 297:18 298:20,21	207:10 217:23 218:3,7,14,15 266:20 267:4 <b>tumor</b> 9:10 <b>tune</b> 247:20 <b>turn</b> 96:18 135:8 241:10 270:2 <b>turning</b> 96:8 <b>tv</b> 260:6,10,11 290:1,14 <b>tv</b> 3:22 4:12 5:15 20:13,18,21 21:1 24:9 48:16,21 55:16 56:19 59:12 70:1,5,11,20 71:19 72:7 74:10 76:11,19,21,24 77:16 78:12 121:14 122:10,16 122:24 123:10 124:19 126:7,19 127:7,16 128:7,15 128:18,22 129:6 129:24 130:10 133:3 135:19,20 137:4 138:10,22 140:9 144:9 145:24 147:2,20 147:23 148:18 149:2,4,11,20 150:19,22 151:17 153:17 157:21,23 158:12 169:15 177:3 178:2 179:7 182:15 183:7 190:8 194:17 195:2 196:10 197:10,16 203:3 207:23 208:3,6,18 209:7,14,15 265:9 270:5 275:9 277:16 280:20 281:5,9 282:2,8 286:12,20 287:8 287:16,16,24 288:1,11	<b>tv</b> abbrevio 72:11 76:12,20 77:7,11 77:16,17 79:11,14 79:17,20 <b>tv</b> to 3:22 4:5,12 5:15 20:13,15,24 48:16,22 50:17 52:8,20 55:17 56:19 59:12 69:18 70:1,6,11,20 71:19 72:9,10 76:11,20,22 77:1 77:15,18 78:11 79:15 121:14 122:10,16 123:1 123:10 124:19 126:7,19 127:8,16 128:8,15,19,23 129:6,24 130:10 133:3 135:19,20 137:4 138:10,22 140:9 144:9 146:1 147:2 157:21,23 158:12 163:13 169:15 177:3 178:2 179:7 182:15 194:17 195:3 196:10 197:10,16 198:21 203:3 211:2,18,23 212:6 270:5 275:10 278:21 280:15 281:9 286:15,15,20,23 288:11 <b>tv</b> to 77:10 88:9 279:12 <b>tv</b> tr 20:18 <b>tv</b> ts 3:24 4:5 48:16 48:17 49:4,6,19 50:5 52:9,21 76:12,20 77:4 88:9 151:7 <b>tv</b> tsecur 20:15 50:17 68:5 69:15 72:11 76:22	278:16,21 279:3 <b>tv</b> tsecurs 279:12 <b>twin</b> 168:9 <b>two</b> 7:16,17 9:16 10:10,17 11:7 22:2 32:22 33:13 38:23,23 42:15 49:24 74:11 82:14 84:12 134:24 135:13 164:12 174:1 180:23 183:10 193:12,18 196:5 198:16 199:15,17 201:23 228:1 239:2 271:20 277:9 279:9 280:24 <b>type</b> 8:1 10:18 25:24 101:16 104:20 119:17 143:1 157:2 169:23 178:23 185:18 203:18 218:16,16 219:6 229:3 269:20 287:19 <b>types</b> 30:19 61:23 78:8 88:23 101:17 102:11,18 104:2 104:20 159:10 183:10 282:9,11 285:4 <b>typical</b> 14:7 <b>typing</b> 57:10	79:10 112:11 117:11 172:5 191:20 214:13 238:16,21 240:3 241:17 253:17 <b>ultrapro</b> 291:7,12 <b>ultraviolet</b> 168:11 <b>um</b> 111:2 <b>unclear</b> 143:14 <b>uncomfortable</b> 226:7 <b>undergo</b> 112:2 <b>undergoes</b> 265:8 <b>underneath</b> 152:13 178:10 <b>understand</b> 5:23 6:13,23 13:1 57:1 98:8,14,20 99:4 105:14 107:16 110:11 118:1,2 125:4 142:6 154:22 223:17,18 230:23 231:11,14 232:20 <b>understanding</b> 14:6 17:19 24:14 56:24 74:15 87:6 97:24 104:4 105:5 107:11,15 111:5 166:8 176:16 184:2,11 192:15 207:11 212:21,23 219:11 239:15 <b>understood</b> 6:15 15:12 16:12 24:13 268:13 <b>unethical</b> 206:23 <b>unexplored</b> 224:2 <b>unfair</b> 223:1 <b>unfort</b> 202:10 <b>unfortunate</b> 202:11 <b>unfortunately</b> 166:6 202:11 <b>uniaxial</b> 136:9,21 143:16,17 <b>unique</b> 17:12 109:5
--	---	--	--	--

109:5 <b>unit</b> 12:17,24 <b>united</b> 1:1 101:18 102:2 230:24 231:6,12,20 234:2 <b>university</b> 46:8 <b>unknown</b> 127:13 <b>unmet</b> 150:21 151:6 <b>unscientific</b> 79:3 <b>unsure</b> 27:1,4 <b>unusual</b> 82:4 <b>update</b> 62:3 <b>updated</b> 54:4 <b>updates</b> 130:7 <b>upgrading</b> 172:3 <b>ureter</b> 9:14 10:3 <b>urethra</b> 75:20,23 82:20 85:21,23 141:19 143:20 154:8 <b>urethral</b> 144:24 265:11 <b>urethrolisis</b> 270:19 <b>urethrovesical</b> 208:9 <b>urge</b> 33:15 34:3 178:23,23 <b>urinary</b> 4:6 8:8 11:20 12:1,9 52:21 72:2,6,22 73:16 74:17 265:11 281:6 282:13 <b>urinate</b> 192:6,10 <b>urinating</b> 85:18 <b>urine</b> 295:17 <b>urogyne</b> 33:1 <b>urogynecologist</b> 5:13 <b>usb</b> 34:19 36:20 37:5 <b>usbs</b> 37:9 <b>use</b> 14:4,11 15:7 16:17 17:24 18:3 19:2,9 40:12 53:7	69:11 74:22 75:5 75:14 76:3,4 77:15,16 78:4,15 90:10 91:15,15 99:3,14 100:4 101:15,16 104:2 109:16 112:9 113:9,24 117:18 117:23 121:18 124:19 125:22 127:22 130:4 131:8,16 132:1,1 132:18,20,23 133:22,24 146:9 148:3,15 158:19 175:21 181:13 185:7,20 187:8 188:5,8,9,11,12 188:17,20 189:1 191:5 198:20,21 202:17 203:15 209:4,5 212:14 216:4,13,24 221:21 223:22 237:9 246:16 249:5,16,18 251:12 252:8,16 253:8 275:3,3 <b>useful</b> 226:20 282:1 <b>usually</b> 121:9 <b>uterosacral</b> 134:12 175:17 217:16 295:14 <b>utility</b> 190:7 <b>utilize</b> 107:3 <b>utilizing</b> 289:6 <b>uv</b> 168:11 <hr/> <b>V</b> <hr/> <b>vagina</b> 51:12 170:11 226:12 230:14,19,20 294:11,12,15 <b>vaginal</b> 8:9 11:20 12:2,9 44:15 51:21 94:8 95:2	134:2 144:11 216:13 217:1 225:18 226:16,19 227:4,16,23,24 228:3,9 292:20 293:14 295:3,4,4 297:2 <b>vaginas</b> 297:16 <b>vague</b> 109:21 142:13 151:14 163:8 246:17 <b>validated</b> 140:22 266:1 <b>validity</b> 179:5 299:15 <b>value</b> 275:2 <b>variables</b> 218:23 <b>variation</b> 175:23 <b>variety</b> 25:18 124:23 173:20 188:10 211:4 273:3 <b>various</b> 20:1 48:8 122:3,15,20 124:18 273:16 275:20 281:15 285:3 <b>vary</b> 153:9 <b>vascular</b> 166:5 <b>vcs</b> 276:19 <b>venues</b> 125:3 <b>verbalized</b> 17:23 <b>verbally</b> 6:9 <b>verbiage</b> 198:11,14 202:23 <b>version</b> 25:3 157:1 157:18 168:23 169:10,13 203:10 266:24 <b>versions</b> 122:15 <b>versus</b> 7:4 8:16 143:6 144:2,20 184:13 185:15 187:19 203:17 258:12 268:6 273:24 277:23	278:12,21 280:14 <b>vesical</b> 265:20 <b>vessel</b> 21:7 <b>vessels</b> 166:13,21 <b>viability</b> 181:16 <b>viable</b> 174:21,23 175:22 179:10 <b>videos</b> 34:23 68:2 <b>view</b> 161:1 189:21 189:22 277:13 283:10 <b>viewpoint</b> 236:7 237:1 <b>vignosware</b> 1:10 <b>vipro</b> 290:21 <b>virginia</b> 1:1 <b>viscoelastic</b> 192:2 <b>viscoelastically</b> 192:5 <b>viscoelasticity</b> 266:3 <b>visited</b> 232:5 <b>visual</b> 152:22 <b>visualized</b> 24:10 <b>visually</b> 153:20 154:1,2 <b>vitae</b> 4:8 53:22 <b>voice</b> 240:20 <b>voiding</b> 144:24 178:21 265:22 <b>volume</b> 198:17 273:7 <hr/> <b>W</b> <hr/> <b>w</b> 46:23 <b>wait</b> 69:24 239:8,9 254:7 <b>wall</b> 144:12 <b>want</b> 6:3 23:7 33:14 37:17,17 38:3,14,15 39:7,8 39:11,12 42:11,12 50:19 51:1 55:21 59:21 65:17 66:9 68:20 73:21 81:3 82:1,9 94:2	108:12 112:13,24 127:1 141:1,2 150:8 155:12,18 159:13 160:17 195:24 200:4 202:10 210:19 212:15 213:13,14 213:16 214:4,9,9 214:10,10,11,12 219:14 221:1,2,2 221:3 222:11 226:5 227:6 232:6 234:9,20 236:17 244:20 249:5 269:3 273:15 293:3,7 <b>wanted</b> 91:12 96:16 177:22 217:12 266:18 <b>wants</b> 80:3 112:1 243:12 255:16 <b>warlick</b> 1:19 <b>warmack</b> 1:12 <b>warn</b> 107:5 108:5 111:13 <b>warned</b> 129:15 235:14 <b>warning</b> 28:23,24 29:6 111:23 114:23,24 202:22 247:4,24 248:7,18 <b>warnings</b> 122:24 123:6,9,17,24 126:6 234:23 <b>warren</b> 300:6,16 301:3,21 <b>washington</b> 2:13 <b>wasnt</b> 21:18,18 23:3 85:22 101:18 103:5 206:23 208:5 221:16 231:5,20 233:2 239:17 290:11 <b>wavelength</b> 26:16 <b>way</b> 9:2 16:9 18:4 25:12 30:14 31:23
---	---	---	--	--

36:13 37:16 39:5 39:14 61:14 101:21 107:18 112:12,19 121:8 122:1,6 132:6,12 137:10,22 141:1 142:5 143:1 144:17 145:13,15 146:4 148:11,18 149:19 151:1 154:2,7,7,11,14 154:14 155:2 159:19,21,23 160:15 163:16 164:12,15 168:8 169:19,22 175:14 175:15 177:12 179:14 189:17 192:1,4 193:23 198:16 208:13 222:11,12 228:23 229:13,15 230:14 239:24 241:1,1,3 241:15 242:11 243:6 250:23 268:5 274:4 278:2 279:15 297:12 <b>ways</b> 42:15 110:4 124:24 186:1 206:19 238:9 <b>weak</b> 176:18 <b>weakening</b> 158:23 215:24 <b>wealth</b> 108:13 237:8 <b>wednesday</b> 1:22 <b>week</b> 86:11,11 <b>weigh</b> 183:24 <b>weight</b> 117:1 183:20,20 184:18 189:1,20 200:13 223:16 275:10 281:5,10,22,24 289:24 290:2 291:10 292:3 <b>welcome</b> 168:18	193:1 280:23 <b>welldesigned</b> 139:23 278:3 <b>welleducated</b> 74:3 <b>wellestablished</b> 262:2 <b>wellplaced</b> 119:8 <b>wellrespected</b> 140:1 <b>wellstudied</b> 76:7 <b>welltrained</b> 249:16 <b>went</b> 26:21 27:4 30:21 101:11 105:2 228:20,21 228:21 277:7,13 282:21 286:9,20 <b>west</b> 1:1 <b>weve</b> 31:22 40:3 55:19 64:8 65:20 71:1 96:8 110:4 269:15 <b>whatnot</b> 269:7 <b>whats</b> 31:20 38:4 73:11 77:24 104:4 108:2 111:9,9 141:16 173:18 176:16 178:7 179:2 192:15 198:1 212:19 249:19 250:20 279:24,24 283:18 <b>wheeler</b> 1:6 <b>wheres</b> 217:13 <b>white</b> 35:11 37:13 <b>whos</b> 255:14,15 <b>wide</b> 76:10 79:3 151:17 <b>width</b> 148:22 149:2 151:20 152:13,13 152:15 153:24 281:5,11 <b>willy</b> 226:18 <b>win</b> 241:10 <b>wish</b> 93:14 220:22 275:14 <b>wishing</b> 204:18	<b>wistar</b> 164:14 199:4,4,5 <b>withdraw</b> 253:18 <b>witness</b> 5:7 38:21 39:2 40:13 41:1 42:2,5,13 45:2 50:13,16,19,22 51:2 52:14 53:11 55:22 66:8,12,18 66:21 68:5 69:1,9 69:15,17 157:7,10 157:13 211:7 235:23 239:10 257:19 258:16 268:23 300:9 301:7,10 <b>woman</b> 144:10 <b>womans</b> 144:11 225:18 263:13 <b>women</b> 129:17 143:7 144:2 186:24 243:16 272:19 279:8 280:20 289:9 <b>word</b> 13:11 110:10 115:12 158:15 179:18 239:24 257:12 285:18 292:9 <b>words</b> 25:22 87:10 108:11 124:9 160:16 185:20 195:24 201:1 207:12 226:3 229:15 273:20 <b>work</b> 12:19 14:15 16:15 32:8,20 33:10 34:3 36:13 58:11,15 60:17 62:20 73:4 103:6 117:5 121:24,24 146:4 151:20 156:2 160:17 170:1 173:14 187:20 189:19 191:18 199:5	208:11 222:11 244:16 256:22 265:4,4 286:3 290:18 297:7 299:5 <b>worked</b> 33:6 97:4 277:6 <b>working</b> 85:22 86:12,12 117:6 140:20 156:17 255:21 276:6 <b>works</b> 33:14 78:15 206:19 213:4 243:17 <b>worse</b> 229:17 283:6 291:6 <b>worth</b> 221:19,20 <b>wouldnt</b> 80:5 118:22,24 274:5 274:17 <b>wound</b> 81:6 173:2 173:3,4,5,12,18 173:19,23 174:6,8 174:9,12,15,20 175:4,8 182:2,11 214:21 215:22 292:15 297:1,13 298:12 <b>woundhealing</b> 174:2 <b>woven</b> 162:12,15 184:21 <b>write</b> 62:2 147:7 <b>writing</b> 124:12 <b>written</b> 83:16 123:22 124:3,14 <b>wrong</b> 247:19 248:10 259:23 274:8 <b>wrongful</b> 254:4,14 <b>wrote</b> 17:6 37:13 173:22 279:18 <b>wyatt</b> 1:13	<b>xl</b> 32:16,17 <hr/> <b>Y</b> <hr/> <b>y</b> 45:13 <b>yeah</b> 19:13,18 23:10 25:20 27:6 31:17 37:14 38:13 38:16 42:13 54:22 64:11 66:18,21 81:2 85:1,1 88:7 110:13 121:2 153:1 155:17 156:13 157:7 158:16 191:2 202:10 210:19 215:18 225:7 231:16 240:9 242:2,7 244:15 250:6 255:5,6 258:13 268:10 274:13 278:18 280:8 281:17 285:18 289:15 291:1 295:10 299:21,22 <b>year</b> 13:19,20 19:5 21:9,24 22:1 33:8 33:9,9 56:12,13 57:19 76:17,19 84:16 189:11 267:21 276:24 <b>years</b> 8:12 12:19 13:7,8 14:10 16:3 17:18,19 21:14,19 22:2,4 24:22 32:22 34:10 57:3 67:24 72:4,5 74:11 75:7,10 76:13 84:16,24 85:1 88:20 98:14 103:4 105:21 106:10 112:17 189:13 201:14 231:13 233:8 242:18 243:7 275:22 283:11,11
--	--	---	---	--

283:13 297:9 <b>yesterday</b> 62:17 63:18 137:24 <b>york</b> 31:4 <b>youd</b> 17:9 22:10 168:18 <b>youll</b> 60:6 68:19 70:5,10 96:18 160:17 169:7 <b>young</b> 85:17 <b>youre</b> 5:13 6:8 18:19 19:13 27:1 27:3 29:13 31:7 42:23 52:2 59:18 73:15 80:21 87:18 92:21 93:19 95:17 97:22 113:13 114:10 115:5 116:17 119:1 121:23 122:19 123:23 130:22 135:20 136:1 137:13 147:18 148:2 151:2,3 153:20,24 154:2 157:23 158:5 160:19 168:18 169:1,2 170:17,18 176:15 179:2,22 180:12 191:7 193:4 194:6,9,22 195:11 196:12 198:6,7 200:2,12 201:9 203:16 206:11 207:22 212:14 214:4,19 216:7 218:2,5 230:20 231:5 232:12 234:19 235:5,5,8,10 236:15 242:11 249:15,15 250:12 252:14 254:10 260:24 261:1,5 299:6 <b>youve</b> 7:1,9,12 11:7	11:21 12:13 21:8 21:8,9 22:20 33:4 37:4 39:18 43:23 46:3 47:12,14 51:5 60:22 70:17 74:8 81:13 82:6 84:14,22 85:4,5,6 88:10 91:1 95:4 96:23 122:3 130:6 138:9,14 168:4 196:8 200:7 208:1 208:17,19 209:1,6 213:16 253:18 256:1 259:23 260:5 273:13 285:3 291:7  <b>Z</b> <b>zero</b> 202:20 280:14 <b>zipfel</b> 27:11,13,14 27:14 <b>zyczynski</b> 253:16  <b>0</b>  <b>1</b>  <b>2</b>  <b>3</b>  <b>4</b>  <b>5</b>  <b>6</b>  <b>7</b>  <b>8</b>  <b>9</b> <b>Öchsner</b> 46:24 <b>0</b> 289:16 <b>00</b> 155:21 <b>000</b> 21:9,20 84:21 85:3 186:22,22 209:14 270:23	271:2,2 288:20 291:2 <b>08</b> 289:16 <b>1</b> 3:12 43:7,12,14 82:23 149:3,3,3 149:17,17 150:5,5 152:19,19 177:18 265:23 280:14 <b>10</b> 4:2 50:3,9 92:5,7 92:12 93:22 94:9 96:12,12 291:21 294:23 <b>100</b> 2:3 21:9 22:1 96:2,3 186:22 270:23 271:2 <b>1099</b> 22:14 <b>1099s</b> 22:8,16 268:12 <b>11</b> 4:4 51:4,6,16,17 51:20 52:1 155:21 215:6 288:19,23 289:20 291:21 294:23 <b>117</b> 53:14 <b>11th</b> 300:12 301:17 <b>12</b> 1:23 3:21 4:5 47:9 52:11,16,19 78:4 155:21 177:16,18 <b>120</b> 60:24 61:5,19 62:19,19 <b>12centimeter</b> 77:23 <b>12cv001203</b> 1:9 <b>12cv00258</b> 1:12 <b>12cv00261</b> 1:14 <b>12cv00276</b> 1:19 <b>12cv00279</b> 1:18 <b>12cv00455</b> 1:6 <b>12cv00493</b> 1:15 <b>12cv00497</b> 1:8 <b>12cv00499</b> 1:13 <b>12cv00500</b> 1:18 <b>12cv00501</b> 1:17 <b>12cv00510</b> 1:8 <b>12cv00683</b> 1:9 <b>12cv00737</b> 1:10	<b>12cv00738</b> 1:11 <b>12cv00761</b> 1:10 <b>12cv00786</b> 1:17 <b>12cv00787</b> 1:6 <b>12cv00829</b> 1:13 <b>12cv00842</b> 1:11 <b>12cv00848</b> 1:16 <b>12cv00931</b> 1:7 <b>12cv00939</b> 1:16 <b>12cv00967</b> 1:19 <b>12cv01004</b> 1:7 <b>12cv01013</b> 1:15 <b>12cv01150</b> 1:12 <b>12cv01299</b> 1:14 <b>12md02327</b> 1:3 <b>13</b> 4:8 53:16,18,21 96:17 <b>1384</b> 293:12 <b>14</b> 4:9 54:13,16,21 270:2 <b>15</b> 4:10 13:7,8 55:2 55:4 71:7 231:7 231:22 232:15 233:7 270:3 283:12 <b>1500</b> 188:15 <b>16</b> 4:12 55:11,14 69:24 70:1 300:10 301:7 <b>17</b> 4:13 60:15,19 67:12,14 <b>18</b> 4:14 67:16,22 71:3,4 215:6 <b>188</b> 272:19 <b>1884</b> 2:13 <b>188650</b> 300:18 <b>19</b> 78:4 300:17 <b>19034</b> 2:13 <b>196micron</b> 188:14 <b>1985</b> 285:19,20 <b>1986</b> 285:20 <b>1987</b> 160:19 161:4 165:11,20 <b>1994</b> 8:4 9:22 33:7 <b>1centimeter</b> 149:3 154:9	<b>2</b> 1:3,6,6,7,7,8,8,9,9 1:10,12,13,13,14 1:14,15,15,16,16 1:17,17,18,18,19 1:19 3:14 43:16 43:19 83:19 84:21 85:3 215:6,6 271:10 283:2,3 288:20 289:15,16 300:17 <b>20</b> 92:5,7,12 93:22 94:9 177:18 303:19 <b>200</b> 1:23 96:3 <b>2000</b> 13:19 <b>2000s</b> 13:21 15:14 76:9 <b>2001</b> 216:11 <b>2002</b> 13:20 <b>2004</b> 145:9 <b>2006</b> 136:2 137:1 261:8,16 <b>2007</b> 28:12 <b>2008</b> 28:12 29:8 231:7,22 232:15 233:7 235:4 <b>200micron</b> 187:4 188:14 <b>2011</b> 26:11 27:2 28:23 29:6,9 47:24 247:4,24 248:7,18 <b>2012</b> 16:1 <b>2014</b> 29:14 <b>2015</b> 56:13 122:18 <b>2016</b> 1:22 300:12 301:17 <b>20centimeter</b> 9:14 <b>20something</b> 258:13 <b>21</b> 96:12 <b>23</b> 278:13 <b>2327</b> 1:4 <b>24</b> 56:2 266:13 295:23,24 <b>25</b> 17:18 105:20
--	--	--	---	---

Jaime Sepulveda, M.D.

Page 347

112:17 243:7	<b>5</b> 3:4,18 46:15,18	<b>96</b> 33:2		
278:14	240:17 271:12	<b>97</b> 33:2		
<b>26</b> 56:2 283:1,2	291:2	<b>99</b> 40:19		
288:4,11	<b>50</b> 4:2 72:14 96:7			
<b>267</b> 2:13	289:13			
<b>269</b> 3:4	<b>500</b> 2:12 61:2			
<b>28</b> 300:17	<b>51</b> 4:4			
<b>29</b> 96:12	<b>510</b> 212:22 213:1,4			
<b>2year</b> 4:6 52:22	233:6,15 234:14			
<b>3</b> 3:15 21:20 43:21	235:13 249:13			
44:6,7 83:19	<b>513</b> 2:13			
84:21 85:3 105:3	<b>52</b> 4:5			
266:13,13 270:20	<b>522</b> 237:17 238:3			
271:4,6,10,11,13	238:13,17 240:11			
283:3 300:10	241:7,9,20,23			
301:7	242:11 249:12			
<b>30</b> 1:22 177:16,18	<b>522s</b> 240:17 241:3			
189:13 258:11	<b>53</b> 4:8			
300:10 301:7	<b>54</b> 4:9			
<b>300</b> 76:17,19 84:15	<b>55</b> 4:10,12			
<b>300micron</b> 187:4	<b>5millimeter</b> 78:13			
<b>302</b> 3:6	<b>6</b> 3:20 47:2,3 48:19			
<b>303</b> 3:6	291:2			
<b>3031</b> 2:3	<b>60</b> 4:13			
<b>33</b> 1:23 299:24	<b>6280</b> 2:7			
<b>3352</b> 2:4	<b>7</b> 3:17,22 45:16,18			
<b>36</b> 134:12	45:21,21 48:20			
<b>3millimeter</b> 78:13	49:1 270:20			
<b>4</b> 1:23 3:16 45:20	<b>70</b> 63:10 258:11,12			
46:1 280:14	<b>70s</b> 257:10			
299:24	<b>71</b> 4:14			
<b>400</b> 2:8,12 209:14	<b>73</b> 258:3,12			
237:10,10 240:23	<b>75</b> 148:22 149:3,17			
<b>4000</b> 2:8	150:5 152:19			
<b>43</b> 3:12,14	154:8			
<b>44</b> 3:15 279:5	<b>75204</b> 2:4			
<b>45</b> 266:13 270:17	<b>77706</b> 2:7			
279:18	<b>795</b> 2:4			
<b>454</b> 272:19	<b>8</b> 1:23 3:23 49:4,8			
<b>46</b> 3:16,18 272:20	<b>80</b> 186:22 271:2			
<b>47</b> 3:20 155:21	<b>800</b> 2:8			
272:20	<b>888</b> 2:4			
<b>474</b> 289:16	<b>9</b> 3:19 4:1 46:13,17			
<b>48</b> 272:20	49:11,16 56:2,2			
<b>49</b> 3:22,23 4:1	258:3,12 297:24			
272:21 289:13	<b>90s</b> 76:9			